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**PATENT**  
**Customer No. 22,852**  
**Attorney Docket No. 05725.0932**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re National Stage of International Application )  
No. PCT/FR01/00229 of: )  
Véronique FERRARI )  
Application No.: 09/937,314 ) Group Art Unit: Unassigned  
Filed: September 24, 2001 ) Examiner: Unassigned  
371(c) date: December 6, 2001 )  
For: A TRANSFER-FREE MASCARA )  
COMPOSITION COMPRISING AT )  
LEAST ONE VOLATILE SOLVENT AND )  
AT LEAST ONE POLYMER (AS )  
AMENDED) )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**SECOND PRELIMINARY AMENDMENT**

Prior to examination of the above-identified application, please amend the application as follows.

**Amendments to the Specification** are included in this paper.

**Amendments to the Claims** are reflected in the listing of claims in this paper.

**Remarks** follow the amendment section of this paper at page 13.

**Attachments** to this amendment include:

**Exhibit 1 - International Cosmetic Ingredient Dictionary and Handbook ("CTFA") page 606**

**Exhibit 2 -** Certified Translation of French Priority Document

**Exhibit 3 -** Pending Claims in Copending Applications

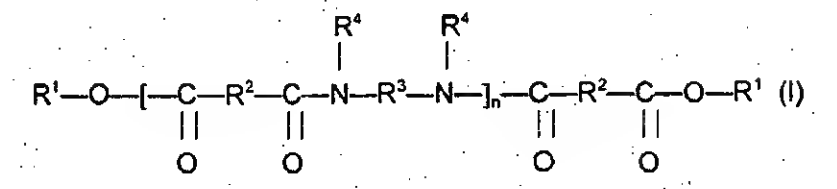
AMENDMENTS TO THE SPECIFICATION:

Please amend the Title as follows:

A TRANSFER-FREE MASCARA COMPOSITION COMPRISING AT LEAST ONE FATTY-PHASE THAT IS STRUCTURED WITH VOLATILE SOLVENT AND AT LEAST ONE POLYMER

Please amend the Abstract as follows:

The invention relates to a physiologically acceptable, in particular mascara, cosmetic composition comprising at least one liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured by and at least one polymer chosen from polymers of following formula (I):



in which n denotes a number of amide units, such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups; R<sup>1</sup> is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms; R<sup>2</sup> independently represents, in each case, a C<sub>4</sub> to C<sub>42</sub> hydrocarbonaceous group, provided that 50% of the R<sup>2</sup> groups represent a C<sub>30</sub> to C<sub>42</sub> hydrocarbonaceous group; R<sup>3</sup> independently represents, in each case, an organic group provided with at least 2

carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and  $R^4$  independently represents, in each case, a hydrogen atom, a  $C_1$  to  $C_{10}$  alkyl group or a direct bond to  $R^3$  or another  $R^4$ , so that the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined by  $R^4-N-R^3$ , with at least 50% of the  $R^4$  groups representing a hydrogen atom. ~~with a weight-average molecular mass of less than or equal to 100 000, comprising a) a polymer backbone having hydrocarbonaceous repeat units provided with at least one heteroatom and b) optionally functionalized pendant and/or end fatty chains having from 6 to 120 carbon atoms which are bonded to these units, the liquid fatty phase and the polymer forming a physiologically acceptable medium. This composition is provided in particular in the form of a stick of lipstick, the application of which results in a notable glossy and transfer-free layer with good hold over time.~~

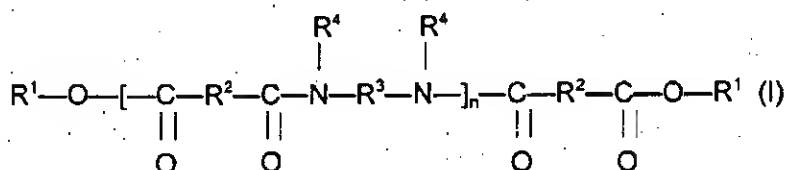
**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-132. (Canceled)

133. (New) A method of making a mascara comprising including in said mascara:

- (i) at least one volatile solvent,
- (ii) at least one polymer chosen from polymers of following formula (I):



in which n denotes a number of amide units, such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups; R<sup>1</sup> is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms; R<sup>2</sup> independently represents, in each case, a C<sub>4</sub> to C<sub>42</sub> hydrocarbonaceous group, provided that 50% of the R<sup>2</sup> groups represent a C<sub>30</sub> to C<sub>42</sub> hydrocarbonaceous group; R<sup>3</sup> independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen

atoms; and  $R^4$  independently represents, in each case, a hydrogen atom, a  $C_1$  to  $C_{10}$  alkyl group or a direct bond to  $R^3$  or another  $R^4$ , so that the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined by  $R^4-N-R^3$ , with at least 50% of the  $R^4$  groups representing a hydrogen atom;

- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

134. (New) The method for making a mascara according to claim 133, wherein said at least one volatile solvent is chosen from isododecane.

135. (New) The method for making a mascara according to claim 134, wherein said at least one polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

136. (New) The method for making a mascara according to claim 135, wherein said mascara further comprises PVP.

137. (New) The method for making a mascara according to claim 133, wherein said mascara further comprises PVP.

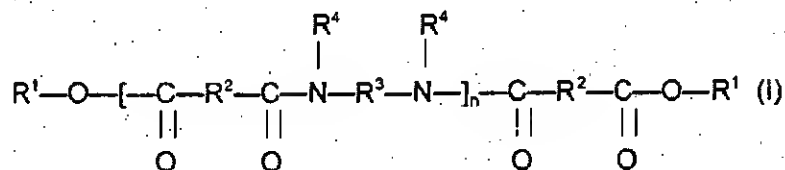
138. (New) The method of making a mascara according to claim 133, further comprising a liquid fatty phase structured by said at least one polymer.

139. (New) A method of making a mascara comprising including in said mascara:

- (i) at least one volatile solvent;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

140. (New) A method for making up eyelashes comprising applying to said eyelashes a mascara comprising:

- (i) at least one volatile solvent;
- (ii) at least one polymer chosen from polymers of following formula (I):





in which  $n$  denotes a number of amide units, such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups;  $R^1$  is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms;  $R^2$  independently represents, in each case, a  $C_4$  to  $C_{42}$  hydrocarbonaceous group, provided that 50% of the  $R^2$  groups represent a  $C_{30}$  to  $C_{42}$  hydrocarbonaceous group;  $R^3$  independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and  $R^4$  independently represents, in each case, a hydrogen atom, a  $C_1$  to  $C_{10}$  alkyl group or a direct bond to  $R^3$  or another  $R^4$ , so that the nitrogen atom to which both  $R^3$  and  $R^4$  are bonded forms part of a heterocyclic structure defined by  $R^4-N-R^3$ , with at least 50% of the  $R^4$  groups representing a hydrogen atom;

- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

141. (New) The method for making up eyelashes according to claim 140, wherein said at least one volatile solvent is chosen from isododecane.

142. (New) The method for making up eyelashes according to claim 141, wherein said at least one polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

143. (New) The method for making up eyelashes according to claim 142, wherein said mascara further comprises PVP.

144. (New) The method for making up eyelashes according to claim 140, wherein said mascara further comprises PVP.

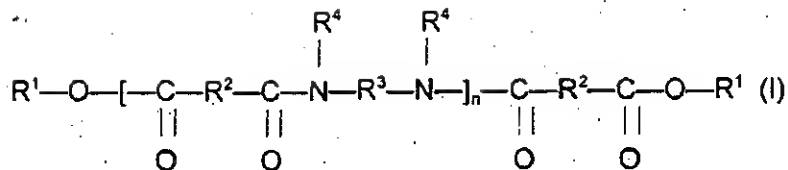
145. (New) The method for making up eyelashes according to claim 140, wherein said mascara further comprises a liquid fatty phase structured by said at least one polymer.

146. (New) A method for making up eyelashes comprising applying to said eyelashes a mascara comprising:

- (i) at least one volatile solvent;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;
- (iv) at least one coloring agent; and
- (v) at least one preservative.

147. (New) A method for making a mascara comprising mixing:

- (i) at least one volatile solvent;
- (ii) at least one polymer chosen from polymers of following formula (I):



in which  $n$  denotes a number of amide units, such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups;  $\text{R}^1$  is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms;  $\text{R}^2$  independently represents, in each case, a  $\text{C}_4$  to  $\text{C}_{42}$  hydrocarbonaceous group, provided that 50% of the  $\text{R}^2$  groups represent a  $\text{C}_{30}$  to  $\text{C}_{42}$  hydrocarbonaceous group;  $\text{R}^3$  independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and  $\text{R}^4$  independently represents, in each case, a hydrogen atom, a  $\text{C}_1$  to  $\text{C}_{10}$  alkyl group or a direct bond to  $\text{R}^3$  or another  $\text{R}^4$ , so that the nitrogen atom to which both  $\text{R}^3$  and  $\text{R}^4$  are bonded forms part of a heterocyclic structure defined by  $\text{R}^4\text{---N---R}^3$ , with at least 50% of the  $\text{R}^4$  groups representing a hydrogen atom;

- (iii) water;
- (iv) at least one coloring agent;
- (v) at least one preservative; and
- (vi) at least one neutralizing agent.

148. (New) The method for making a mascara according to claim 147, wherein said at least one volatile solvent is chosen from isododecane.

149. (New) The method for making a mascara according to claim 148, wherein said at least one polymer is chosen from ethylenediamine/stearyl dimer tallate copolymer.

150. (New) The method for making a mascara according to claim 149 wherein said mascara further comprises PVP.

151. (New) The method for making a mascara according to claim 148, wherein said mascara further comprises PVP.

152. (New) The method for making a mascara according to claim 147, wherein said mascara further comprises a liquid fatty phase structured by said at least one polymer.

153. (New) A method for making a mascara comprising mixing:

- (i) at least one volatile solvent;
- (ii) at least one polymer chosen from ethylenediamine/stearyl dimer tallate copolymer;
- (iii) water;

- (iv) at least one coloring agent;
- (v) at least one preservative; and
- (vi) at least one neutralizing agent.

Remarks

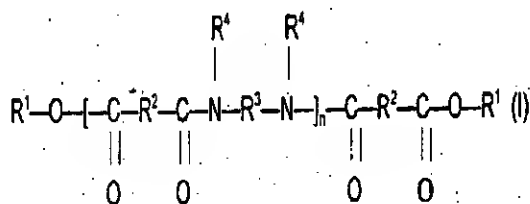
**I. Status of the Claims**

Claims 1-42 were previously canceled without prejudice, and claims 43-132 are canceled herein without prejudice. Claims 133-153 have been added and are the only pending claims.

Support for new claims 133-153 can be found in the application as originally filed. For the Examiner's convenience, Applicant points out in the following Table 1, the specific written description support in the specification for the elements of claims 133-153.

**Table 1.**

<b>Element</b>	<b>Support in Specification</b>
A method of making a mascara	See page 7, ll. 20-21, describing "products for making up the eyes, such as . . . mascaras." See also pages 38 to 40, Examples 1 and 2, conveying how to make a cosmetic composition, i.e., a lipstick. Accordingly, the disclosure as a whole reasonably conveys how to make other cosmetic compositions, such as mascara, without undue experimentation.
At least one volatile solvent	See pages 6, l. 24 to page 7, l. 21 and page 24 l. 23 to page 25, l. 6.
At least one polymer chosen from polymers of following formula (I):	See page 13, l. 12 to page 14, l. 11.



in which n denotes a number of amide units, such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups; R<sup>1</sup> is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms; R<sup>2</sup> independently represents, in each case, a C<sub>4</sub> to C<sub>42</sub> hydrocarbonaceous group, provided that 50% of the R<sup>2</sup> groups represent a C<sub>30</sub> to C<sub>42</sub> hydrocarbonaceous group; R<sup>3</sup> independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and R<sup>4</sup> independently represents, in each case, a hydrogen atom, a C<sub>1</sub> to C<sub>10</sub> alkyl group or a direct bond to R<sup>3</sup> or another R<sup>4</sup>, so that the nitrogen atom to which both R<sup>3</sup> and R<sup>4</sup> are bonded forms part of a heterocyclic structure defined by R<sup>4</sup>-N-R<sup>3</sup>, with at least 50% of the R<sup>4</sup> groups representing a hydrogen atom

Water	See page 28, II. 1-5, stating that the inventive compositions may comprise an aqueous phase comprising water.
At least one coloring agent	See page 27, I. 13, disclosing that the inventive compositions may comprise coloring materials. See also page 30, I. 4 to page 31, I. 13.
At least one preservative	See page 27, I. 14, disclosing that the inventive composition may comprise preservatives.
At least one neutralizing agent	See page 27, II. 15-16, disclosing that the inventive composition may comprise neutralizing agents.

Isododecane	See page 26, ll. 25-26, particularly mentioning the use of isododecane as a volatile solvent; see also page 24, l. 6, particularly mentioning the use of isododecane as an oil.
Ethylenediamine/stearyl dimer tallate copolymer	See page 15, l. 23 to page 16, l. 4 of the specification reciting Uniclear and that Uniclear is "a blend of copolymer of a C <sub>36</sub> diacid condensed with ethylene-diamine." See also <u>International Cosmetic Ingredient Dictionary and Handbook</u> ("CTFA") page 606 (attached herewith as Exhibit 1), reciting that ethylenediamine/stearyl dimer tallate copolymer is at least one copolymer of ethylenediamine and tall oil dimer acid monomers, end-blocked with stearyl alcohol and further reciting that a trade name for ethylenediamine/stearyl dimer tallate copolymer is Uniclear. Thus, the specification reasonably conveys the use of at least one ethylenediamine/stearyl dimer tallate copolymer to make a mascara and the use for making-up eyelashes using a mascara comprising at least one ethylenediamine/stearyl dimer tallate copolymer.
PVP	See page 33, ll. 15-25, disclosing that the inventive compositions may comprise PVP.
A liquid fatty phase structured by at least one polymer	See page 1, ll. 3-7, disclosing that the inventive compositions comprise "a liquid fatty phase including a volatile solvent, structured by a specific polymer."
A method for making up eyelashes	See page 7, ll. 20-21, describing "products for making up the eyes, such as . . . mascara." It is



	known that mascara is applied to eyelashes. See also page 37, ll. 12-18, disclosing further subject matter of the invention as "a cosmetic process for caring for, making up or treating human keratinous substances and in particular . . . superficial body growths." It is known that eyelashes are superficial body growths.
Mixing	See pages 38 to 40, Examples 1 and 2, conveying that various combined components are "mixtures." Thus the disclosure as a whole reasonably conveys mixing components to make a mascara composition, disclosed at page 7, ll. 20-21.

Notably, not all the claims set forth above recite "a liquid fatty phase being structured by at least one polymer" as was recited in original independent claim 1. See also page 1, lines 3-7 of the specification. Such a phrase can be left out of the claims without constituting new matter. In particular, the portion of the specification from page 6, line 24 to page 7, line 23, more generally discloses, including for use in a mascara, the use of specific polymers in combination with at least one volatile salt to achieve notable cosmetic properties. Significantly, at page 7, beginning at line 24, the specification recites that "more specifically," a subject matter of the invention is a structured composition, the liquid fatty phase being structured by at least one polymer. In view of the phrase, "more specifically," it is not necessary to limit all the claims to an embodiment wherein a liquid fatty phase is structured by at least one polymer.

Therefore, all claims 133-153 are in compliance with the written description requirement of 35 U.S.C. § 112, first paragraph.

The Title and Abstract have been amended to more accurately describe the presently claimed invention. Support for the new Title and Abstract can be found throughout the application as originally filed, and as discussed above. Accordingly, no new matter has been added.

**II. U.S. Patent No. 6,497,861 to Wang et al.**

As referenced in the Information Disclosure Statement filed herewith, Applicant is aware of U.S. Patent No. 6,497,861 to Wang et al. ("Wang"), filed on June 21, 2001. However, the Applicant does not believe that this patent is prior art with respect to the present application. In this regard, Applicant points out that the instant application is an entry into the national phase of PCT Application WO 01/52799, which has an international filing date of January 24, 2001, which antedates the filing date of Wang. The instant application is an English translation of the international application, and thus claims 133-153 have full 35 U.S.C. § 112, first paragraph, support in this international application. PCT Application WO 01/52799 in turn relies on French Patent Application No. 00 00920, filed January 24, 2000, in France. Attached herewith as Exhibit 2 is a certified English translation of the French Patent Application No. 00 00920. Claims 133-153 have full § 112, first paragraph, support in this French priority document, as explained in the following table:

Table 2.

Element	Support in French Patent Application No. 00 00920
A method of making a mascara	See page 7, second full paragraph, describing "make-up products for the eyes such as . . . mascaras . . . ." See also pages 36 to 38, Examples 1 and 2, conveying how to make a cosmetic composition, i.e., a lipstick. Accordingly, the disclosure as a whole reasonably conveys how to make other cosmetic compositions, such as mascara, without undue experimentation.
At least one volatile solvent	See paragraph bridging pages 6 and 7, as well as page 22, third full paragraph.
<p>At least one polymer chosen from polymers of following formula (I):</p> $  \begin{array}{c}  \text{R}^1\text{-O}-\left[ \begin{array}{c} \text{C}-\text{R}^2-\text{C}-\text{N}-\text{R}^3-\text{N} \\ \parallel \quad \parallel \\ \text{O} \quad \text{O} \end{array} \right]_n-\begin{array}{c} \text{C}-\text{R}^2-\text{C}-\text{O}-\text{R}^1 \\ \parallel \quad \parallel \\ \text{O} \quad \text{O} \end{array} \quad (I)  \end{array}  $ <p>in which n denotes a number of amide units, such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups; R<sup>1</sup> is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms; R<sup>2</sup> independently represents, in each case, a C<sub>4</sub> to C<sub>42</sub> hydrocarbonaceous group, provided that 50% of the R<sup>2</sup> groups represent a C<sub>30</sub> to C<sub>42</sub> hydrocarbonaceous group; R<sup>3</sup> independently represents, in each case, an organic group</p>	See paragraph bridging pages 11 and 12.

provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and R <sup>4</sup> independently represents, in each case, a hydrogen atom, a C <sub>1</sub> to C <sub>10</sub> alkyl group or a direct bond to R <sup>3</sup> or another R <sup>4</sup> , so that the nitrogen atom to which both R <sup>3</sup> and R <sup>4</sup> are bonded forms part of a heterocyclic structure defined by R <sup>4</sup> -N-R <sup>3</sup> , with at least 50% of the R <sup>4</sup> groups representing a hydrogen atom	
Water	See page 25, first full paragraph, stating that the inventive compositions may contain an aqueous phase containing water.
At least one coloring agent	See page 24, third line of the fourth paragraph, disclosing that the inventive compositions may comprise dyestuffs. See also page 27, first full paragraph to page 28, first full paragraph.
At least one preservative	See page 24, fourth line of the fourth paragraph, disclosing that the inventive composition may comprise preserving agents.
At least one neutralizing agent	See page 24, sixth line of the fourth paragraph, disclosing that the inventive composition may comprise neutralizing agents.
Isododecane	See page 23, second full paragraph, particularly mentioning the use of isododecane as a volatile solvent; see also page 21, l. 20 of the first paragraph, particularly mentioning the use of isododecane as an oil.
Ethylenediamine/stearyl dimer tallate copolymer	See page 14, first full paragraph, reciting Uniclear and that Uniclear is "a mixture of copolymers of a C <sub>36</sub> diacid coupled with ethylenediamine." See also <u>International Cosmetic Ingredient Dictionary and Handbook</u> ("CTFA") page 606 (attached herewith as Exhibit 1), reciting that

	ethylenediamine/stearyl dimer tallate copolymer is at least one copolymer of ethylenediamine and tall oil dimer acid monomers, end-blocked with stearyl alcohol and further reciting that a trade name for ethylenediamine/stearyl dimer tallate copolymer is Uniclear. Thus, the specification reasonably conveys the use of at least one ethylenediamine/stearyl dimer tallate copolymer to make a mascara and the use for making-up eyelashes using a mascara comprising at least one ethylenediamine/stearyl dimer tallate copolymer.
PVP	See page 30, second full paragraph, disclosing that the inventive compositions may comprise PVP.
A liquid fatty phase structured by at least one polymer	See page 1, ll. 4-6 of the first paragraph, disclosing that the inventive compositions comprise "a liquid fatty phase comprising a volatile solvent, structured with a specific polymer."
A method for making up eyelashes	See page 7, second full paragraph, describing "make-up products for the eyes, such as . . . mascara." It is known that mascara is applied to eyelashes. See also page 34, second full paragraph, disclosing further subject matter of the invention as "a cosmetic care, make-up or treatment process for the keratin materials of human beings, and in particular . . . superficial body growths." It is known that eyelashes are superficial body growths.
Mixing	See pages 36 to 38, Examples 1 and 2, conveying that various

	combined components are "mixtures." Thus the disclosure as a whole reasonably conveys mixing components to make a mascara composition, disclosed at page 7, line 12 of the second full paragraph.
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As can be seen from Table 2, claims 133-153 have full 35 U.S.C. § 112, first paragraph support in the French priority application, and hence are entitled to date benefit of the January 24, 2000, priority claimed.

Nor does Applicant believe that the claims presented herein define the same patentable invention as any of those recited in the claims of Wang. Hence, Applicant does not believe that there is any interfering subject matter between the present claims and those of Wang.

**III. U.S. Patent Nos. 5,783,657 to Pavlin et al, 6,242,509 to Berger et al. and Bush Boake Allen**

As referenced in the Information Disclosure Statements filed on December 6, 2001, and herewith, Applicant is aware of U.S. Patent Nos. 5,783,657 to Pavlin et al., 6,242,509 to Berger et al. and the Technical Services Bulletin of Bush Boake Allen. While these references are prior work of the supplier of one of the polyamide polymers for use in the present invention, Applicant does not believe that any of these references, taken alone or in combination, teaches or suggests the invention as presently claimed.

#### IV. Patentability over Copending Applications and Patents Issued Therefrom Cited in Information Disclosure Statements

For the Examiner's convenience, Applicant identifies in Table 3 below all of the related copending applications listed on the PTO Forms 1449 filed on November 4, 2003, including filing date, assignment, and inventor information. This should assist the Examiner in assessing any possible issues under statutory double patenting. The assignment information is included because it relates to issues of terminal disclaimer and potential 35 U.S.C. §§ 102(e)/103 issues discussed below.

**Table 3.**

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
05725.0594-00000	09/733,899	December 12, 2000	Mohamed KANJI, Carl ORR, and Carlos O. PINZON	COSMETIC COMPOSITIONS CONTAINING AT LEAST ONE HETERO POLYMER AND AT LEAST ONE FILM-FORMING SILICONE RESIN AND METHODS OF USING	Reel 011723, Frame 0503, on April 20, 2001	U.S. Published Application No. US 2002/011477 3 A1 Dated: August 22, 2002
05725.0595-00000	09/733,900	December 12, 2000	Carlos O. PINZON and Paul THAU	COSMETIC COMPOSITIONS CONTAINING HETEROPOLYMERS AND OIL-SOLUBLE CATIONIC SURFACTANTS AND METHODS OF USING SAME	Reel 011639, Frame 0897, on March 23, 2001	U.S. Published Application No. US 2002/012278 1 A1 (Republished US 2003/008212 6A9 on May 1, 2003) Dated: September 5, 2002
05725.0656-	09/618,066	July 17, 2000	Véronique FERRARI	COMPOSITIONS IN RIGID FORM	Reel 011057, Frame 0676,	N/A: Will not publish

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication, Date
00000			and Pascal SIMON	STRUCTURED WITH A POLYMER	on September 11, 2000	
05725.0656-01000	09/685,577	October 11, 2000	Véronique FERRARI and Pascal SIMON	COMPOSITIONS IN RIGID FORM STRUCTURED WITH A POLYMER	Reel 011455, Frame 0203, on January 22, 2001	N/A: Will not publish
05725.0659-00000	09/618,032, issued on June 11, 2002, as U.S. Patent No. 6,402,408	July 17, 2000	Véronique FERRARI	COMPOSITION CONTAINING A LIQUID FATTY PHASE GELLED WITH A POLYAMIDE CONTAINING ESTER END GROUPS	Reel 011057, Frame 0007, on September 12, 2000	U.S. Patent No. 6,402,408 Dated: June 11, 2002
05725.0659-01000	09/685,578	October 11, 2000	Véronique FERRARI	COMPOSITION CONTAINING A LIQUID FATTY PHASE GELLED WITH A POLYAMIDE CONTAINING ESTER END GROUPS	Reel 011549, Frame 0914, on February 20, 2001	N/A: Will not publish
05725.0795-01000	10/182,830	August 2, 2002 371 (c) Date: January 21, 2003	Roberto CAVA-ZZUTI, Véronique FERRARI, Brian MATTOX, Carlos O. PINZON, and Paul THAU	USE OF POLYAMIDE POLYMER IN A MASCARA COMPOSITION COMPRISING AT LEAST ONE SOLID SUBSTANCE HAVING A MELTING POINT OF 45°C OR GREATER	Reel 014040, Frame 0345, on May 7, 2003	U.S. Published Application No. 2003/014783 7 A1 Dated: August 7, 2003
05725.0795-02000	Not yet assigned	February 27, 2004	Roberto CAVA-ZZUTI, Véronique FERRARI, Brian MATTOX, Carlos O. PINZON,	METHOD OF MAKING A MASCARA COMPOSITION COMPRISING POLYAMIDE POLYMER AND AT LEAST ONE SOLID	Reel 014040, Frame 0345, on May 7, 2003	Not yet published



Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
			and Paul THAU	SUBSTANCE HAVING A MELTING POINT OF 45°C OR GREATER		
05725. 0806- 00000	09/733,896	December 12, 2000	Carlos O. PINZON and Paul THAU	COMPOSITIONS CONTAINING HETEROPOLY- MERS AND OIL- SOLUBLE POLYMERS AND METHODS OF USING SAME	Reel 011765, Frame 0183, on April 26, 2001	U.S. Published Application No. US 2002/012003 6 A1 (Republished US 2003/012542 7 A9 on July 3, 2003) Dated: August 29, 2002
05725. 0808- 00000	09/733,898	December 12, 2000	Carlos O. PINZON, Paul THAU, and Isabelle BARA	COMPOSITIONS CONTAINING HETEROPOLY- MERS AND OIL- SOLUBLE ESTERS AND METHODS OF USING SAME	Reel 011654, Frame 0869, on April 2, 2001	U.S. Published Application No. US 2002/010731 4 A1 Dated: August 8, 2002
05725. 0809- 00000	09/733,897	December 12, 2000	Carlos O. PINZON and Paul THAU	COMPOSITIONS CONTAINING HETEROPOLY- MERS AND METHODS OF USING SAME	Reel 011646, Frame 0966, on April 4, 2001	U.S. Published Application No. US 2002/011133 0 A1 Dated: August 15, 2002
05725. 0816- 01000	10/203,018	August 5, 2002  371 (c) Date: March 24, 2003	Véronique FERRARI, Richard KOLOD- ZIEJ, Carlos O. PINZON, and Paul THAU	USE OF POLYAMIDE POLYMER IN A MASCARA COMPOSITION COMPRISING AT LEAST ONE INERT FILLER	Reel 014055, Frame 0428, on March 24, 2003	U.S. Published Application No. US 2003/016184 8 A1 Dated: August 28, 2003
05725. 0816-	Not yet assigned	February 27, 2004	Véronique FERRARI,	METHOD OF MAKING A	Reel 014055, Frame 0428,	Not yet published

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
02000			Richard KOLODZIEJ, Carlos O. PINZON, and Paul THAU	MASCARA COMPOSITION COMPRISING A POLYAMIDE POLYMER AND AT LEAST ONE INERT FILLER	on March 24, 2003	
05725.0817-01000	10/203,254	August 7, 2002  371 (c) Date: December 20, 2002	Véronique FERRARI, Carlos O. PINZON, and Paul THAU	COSMETIC COMPOSITIONS CONTAINING AT LEAST ONE HETEROPOLYMER AND AT LEAST ONE GELLING AGENT AND METHODS OF USING THE SAME	Reel 013607, Frame 0258, on December 20, 2002	U.S. Published Application No. US 2003/018578 0 A1 Dated: October 2, 2003
05725.0819-01000	10/129,377	May 3, 2002  371 (c) Date: October 16, 2002	Véronique FERRARI	COMPOSITION STRUCTURED WITH A POLYMER CONTAINING A HETEROATOM AND AN ORGANOCELL-ATOR	Filed October 16, 2002. Not yet recorded.	Not yet published
05725.0832-00000	09/749,036	December 28, 2000	Véronique FERRARI and Véronique JACQUES	COMPOSITION COMPRISING AT LEAST ONE HETERO POLYMER AND AT LEAST ONE PASTY FATTY SUBSTANCE AND METHODS FOR USE	Reel 011723, Frame 0518, on April 20, 2001	U.S. Published Application No. US 2001/003128 0 A1 Dated: October 18, 2001
05725.0895-00000	09/971,028	October 5, 2001	Mohamed KANJI	METHODS OF USE AND OF MAKING A MASCARA COMPRISING AT LEAST ONE COLORING AGENT AND AT LEAST ONE HETEROPOLYM	Reel 012411, Frame 0820, on December 28, 2001	U.S. Published Application No. US 2003/008688 3 A1 Dated: May 8, 2003

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
05725.0895-01000	10/413,217	April 15, 2003	Mohamed KANJI	ER METHODS OF USE AND OF MAKING A MASCARA COMPRISING AT LEAST ONE COLORING AGENT AND AT LEAST ONE POLYAMIDE POLYMER CHOSEN FROM ETHYLENEDIAMINE/STEARYL DIMER TALLATE COPOLYMER	Reel 012411, Frame 0820, on December 28, 2001	U.S. Published Application No. US 2003/019861 3 A1 Dated: October 23, 2003
05725.0895-02000	10/699,780	November 4, 2003	Sue FENG and Mohamed KANJI	METHODS OF DISPERSING AT LEAST ONE COLORING AGENT USING AT LEAST ONE HETEROPOLYMER	Reel 012411, Frame 0820, on December 28, 2001	Not yet published
05725.0896-00000	10/198,931	July 22, 2002	Mohamed KANJI	COMPOSITIONS COMPRISING AT LEAST ONE HETEROPOLYMER AND FIBERS, AND METHODS OF USING THE SAME	Reel 013410, Frame 0044, on October 21, 2002	U.S. Published Application No. US 2004/001362 5 A1 Dated: January 22, 2004
05725.0920-00000	09/899,909, issued on August 13, 2002 as U.S. Patent No. 6,432,391	July 9, 2001	Isabelle BARA	TRANSPARENT SCENTED SOLID COSMETIC COMPOSITION	Reel 012278, Frame 0077, on October 23, 2001	U.S. Patent No. 6,432,391 Dated: August 13, 2002
05725.0932-00000	09/937,314	September 24, 2001  371 (c) Date: December 6, 2001	Véronique FERRARI	A TRANSFER-FREE MASCARA COMPOSITION COMPRISING AT LEAST ONE VOLATILE	Reel 012476, Frame 0507, on January 17, 2002	Not yet published

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
				SOLVENT AND AT LEAST ONE POLYMER		
05725.1003-00000	10/012,029	December 11, 2001	Nathalie COLLIN	COSMETIC COMPOSITION COMPRISING A POLYMER BLEND	Reel 013142, Frame 0645, on August 1, 2002	U.S. Published Application No. US 2003/001276 4 A1 Dated: January 16, 2003
05725.1004-00000	10/012,051	December 11, 2001	Nathalie COLLIN	USE OF AT LEAST ONE POLYAMIDE POLYMER IN A MASCARA FOR RAPIDLY INCREASING THE AMOUNT OF MAKE-UP DEPOSITED ON EYELASHES	Reel 012847, Frame 0285, on April 30, 2002	U.S. Published Application No. US 2002/018903 0 A1 Dated: December 19, 2002
05725.1005-00000	10/012,052	December 11, 2001	Nathalie COLLIN	COSMETIC COMPOSITION CONTAINING A WAX AND A POLYMER	Reel 012847, Frame 0264, on April 30, 2002	U.S. Published Application No. US 2002/016833 5 A1 Dated: November 14, 2002
05725.1018-00000	10/046,568	January 16, 2002	Xavier BLIN, Véronique FERRARI, and Frédéric AUGUSTE	NAIL POLISH COMPOSITION COMPRISING A POLYMER	Reel 013109, Frame 0731, on July 18, 2002	U.S. Published Application No. US 2002/019216 8 A1 Dated: December 19, 2002
05725.1020-00000	10/047,987	January 17, 2002	Véronique FERRARI	COSMETIC COMPOSITION COMPRISING A POLYMER AND A FLUORO OIL	Reel 012910, Frame 0028, on May 17, 2002	U.S. Published Application No. US 2002/017269 6 A1 Dated:

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication Date
						November 21, 2002
05725.1187-00000	10/312,083	December 23, 2002  371 (c) Date: March 26, 2003	Patricia LEMANN	COSMETIC COMPOSITION COMPRISING AN EMULSION CONTAINING A LIQUID FATTY PHASE STRUCTURED WITH A POLYMER, AND AN ALKYLENE-OXIDE-CONTAINING EMULSION STABILIZER	Reel 014039, Frame 0976, on March 26, 2003	U.S. Published Application No. US 2003/016180 7 A1 Dated: August 28, 2003
05725.1198-00000	10/450,108	June 11, 2003  371 (c) Date: June 11, 2003	Nathalie COLLIN	COSMETIC COMPOSITION COMPRISING A POLYMER AND FIBERS	Not yet filed/recorded	U.S. Published Application No. US 2004/002863 6 A1 Dated: February 12, 2004
05725.1228-00000	10/466,166	July 14, 2003  371 (c) Date: January 20, 2004	Nathalie COLLIN	COSMETIC COMPOSITION COMPRISING A MIXTURE OF POLYMERS	Filed January 20, 2004. Not yet recorded.	Not yet published
05725.1336-00000	10/459,636	June 12, 2003	Shao Xiang LU and Mohamed KANJI	COSMETIC EMULSIONS CONTAINING AT LEAST ONE HETERO POLYMER AND A SUNSCREEN AND METHODS OF USING SAME	Filed October 3, 2003; not yet recorded	Not yet published
05725.1337-00000	10/618,315	July 11, 2003	Shao Xiang LU, Terry VAN LIEW, and Nathalie	COSMETIC COMPOSITIONS COMPRISING A STRUCTURING AGENT,	Filed August 12, 2003 and January 30, 2004; not yet recorded	Not yet published

Attorney Docket No.	U.S. Patent Application No.	U.S. Filing Date/ 371 (c) Date	Inventors	Title	Assignment Recorded (Reel, Frame, Date)	Publication, Date
			GEFFROY-HYLAND	SILICONE POWDER AND SWELLING AGENT		
05725.1338-01000	10/746,612	December 22, 2003	Shao Xiang LU, Terry VAN LIEW, Nathalie GEFFROY-HYLAND, and Mohamed KANJI	COSMETIC COMPOSITIONS COMPRISING A STRUCTURING AGENT, SILICONE POWDER AND SWELLING AGENT	Not yet filed/recorded	Not yet published
05725.1338-02000	10/747,412	December 22, 2003	Shao Xiang LU and Mohamed KANJI	COSMETIC EMULSIONS CONTAINING AT LEAST ONE HETERO POLYMER AND AT LEAST ONE SUNSCREEN AND METHODS FOR USING THE SAME	Not yet filed/recorded	Not yet published
06028.0018-00000	10/203,375	August 9, 2002 371 (c) Date: August 9, 2002	Nathalie JAGER-LEZER and Jean-Christophe SIMON	COLOURED TRANSPARENT OR TRANSLUCENT COSMETIC COMPOSITION	Reel 013318, Frame 0962, on August 9, 2002	U.S. Published Application No. US 2003/002677 2 A1 Dated: February 6, 2003
06028.0019-00000	10/203,374	August 9, 2002 371 (c) Date: August 9, 2002	Jean-Christophe SIMON and Nathalie JAGER-LEZER	METHOD FOR MAKING A COLOURED MAKE-UP COSMETIC COMPOSITION WITH CONTROLLED TRANSMITTANCE	Reel 013321, Frame 0001, on August 9, 2002	U.S. Published Application No. US 2003/004436 7 A1 Dated: March 6, 2003

A. Copending Applications and Patents

Applicant has considered whether any potential issues arise under 35 U.S.C.

§ 102(e)/§ 103 regarding copending, related applications and patents.

35 U.S.C. § 102(e) states that

[a] person is entitled to a patent unless (e) the invention was described in - (1) an application for patent, published under § 122(b), **by another** filed in the United States before the invention by the application for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or (2) a patent granted on an application for patent **by another** filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing date of an international application filed under the treaty defined in section 351(a) . . . .

See 35 U.S.C. § 102(e) (emphasis added).

Applicant has identified the related copending applications and patents above in Table 3 that were filed prior to January 24, 2000, the priority date of all claims of the present application, as explained above. Applicant does not believe that any of the identified copending U.S. Patent Applications or any relevant publications thereof or relevant PCT publications of a counterpart thereof, describes or suggests the subject matter of claims 133-153 of the present application under 35 U.S.C. § 102(e) and/or § 103.

Also listed in Table 3 is the publication information (U.S. Published Applications and/or U.S. Patents), if any, which correspond to these copending applications and their dates of publication. Moreover, Applicant has provided for the Examiner's convenience

the assignment information in Table 3 or confirmed the obligation of assignment with the assignee, demonstrating that none of these applications, patents, or publications is available as § 102(e)/§ 103 prior art against claims 133-153. See 35 U.S.C. § 103(c). Applicant asserts that all of the applications listed above that were filed prior to the instant application's priority date were commonly owned by the Assignee at the time the instant invention was made, which instant invention was also subject to assignment to the Assignee.

For the Examiner's convenience, Applicant submits herewith copies of the pending claims in each of the copending applications and patents listed in Table 3. See Claims at Exhibit 3. Applicant does not believe that any issue with respect to statutory double patenting under 35 U.S.C. § 101 is present with respect to claims 133-153 of the instant application and the claims of any other copending application or patent listed in Table 3.

**B. Terminal Disclaimer**

Further, solely to expedite prosecution of the instant application, Applicant also submits herewith a Terminal Disclaimer. This Terminal Disclaimer evidences no admission and raises no presumption or estoppel. See M.P.E.P. § 804.02 (quoting Quad Environmental Technologies Corp. v. Union Sanitary District, 20 U.S.P.Q.2d 1392 (Fed. Cir. 1992) for the propositions that "the filing of a terminal disclaimer simply serves the statutory function of removing the rejection of double patenting, and raises neither presumption nor estoppel on the merits of the rejection"). The Terminal Disclaimer is effective and is filed to eliminate the possibility of such a rejection or a rejection based



any of the enumerated files, *i.e.*, to obviate a double patenting rejection, as stated in the language of the terminal disclaimer.

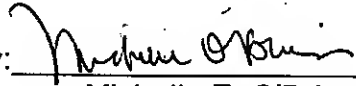
**V. Conclusion**

In view of the foregoing amendments and remarks, Applicant respectfully requests consideration of the application, and timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any fee due in connection with this Amendment to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON,  
FARABOW, GARRETT & DUNNER, L.L.P.

By:   
Michelle E. O'Brien  
Reg. No. 46,203

Dated: February 27, 2004

**Attachments:**

**Exhibit 1 -** International Cosmetic Ingredient Dictionary and Handbook ("CTFA") page 606

**Exhibit 2 -** Certified Translation of French Priority Document

**Exhibit 3 -** Pending Claims in Copending Applications

**EXHIBIT 1**

**International Cosmetic Ingredient Dictionary and Handbook**  
**("CTFA") page 606**

Information Sources: CIR: [SQ]

Chemical Class: Synthetic Polymers

Functions: Binder; Film Former; Viscosity Increasing Agent - Nonaqueous

Technical/Other Name:

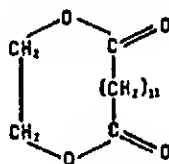
2-Propenol Acid, Polymer with Ethene and Ethenyl Acetate

### ETHYLENE BRASSYLATE

CAS No. 105-95-3 EINECS No. 203-347-8

Empirical Formula:  
 $C_{15}H_{26}O_4$

Definition: Ethylene Brassylate is the cyclic ester that conforms to the formula:



Information Sources: 21CFR172.515, RIFM, TSCA

Chemical Class: Esters

Function: Fragrance Ingredient

Reported Product Categories: Foundations; Moisturizing Preparations; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Personal Cleanliness Products, Misc.

Technical/Other Names:

1,4-Dioxacycloheptadecane-5,17-dione  
Ethylene brassylate (RIFM)  
Ethylene Undecene Dicarboxylate

Trade Name:

AEC Ethylene Brassylate (A & E Connock)

### ETHYLENE/CALCIUM ACRYLATE COPOLYMER

CAS No.: 26445-96-5

Empirical Formula:  
 $(C_3H_4O_2 \cdot C_2H_4)_x \cdot xCa$

Definition: Ethylene/Calcium Acrylate Copolymer is a copolymer of ethylene and calcium acrylate monomers.

Information Sources: 21CFR175.105, CIR: [SQ]

Chemical Class: Synthetic Polymers

Functions: Binder; Film Former

Technical/Other Name:

2-Propenol Acid, Polymer with Ethene, Calcium Salt

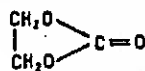
### ETHYLENE CARBONATE

CAS No. 96-49-1 EINECS No. 202-510-0

Empirical Formula:

$C_3H_4O_3$

Definition: Ethylene Carbonate is the organic compound that conforms to the formula:



Information Sources: JCIC, JCLS

Chemical Class: Esters

Function: Solvent

Technical/Other Name:

1,3-Dioxolan-2-one

### ETHYLENEDIAMINE/STEARYL DIMER DILINOLEATE COPOLYMER

Definition: Ethylenediamine/Stearyl Dimer Dilinoleate Copolymer is a copolymer of ethylenediamine and stearyl dimer dilinoleate monomers.

Chemical Class: Synthetic Polymers

Functions: Oral Care Agent; Skin-Conditioning Agent - Miscellaneous; Viscosity Increasing Agent - Nonaqueous

Trade Name:

UNICLEAR (Arizona)

### ETHYLENEDIAMINE/STEARYL DIMER TALLATE COPOLYMER

Definition: Ethylenediamine/Stearyl Dimer Tallate Copolymer is a copolymer of ethylenediamine and tall oil dimer acid monomers, end-blocked with stearyl alcohol.

Chemical Class: Synthetic Polymers

Functions: Oral Care Agent; Skin-Conditioning Agent - Miscellaneous; Viscosity Increasing Agent - Nonaqueous

Trade Name:

UNICLEAR (Arizona)

### ETHYLENE DICHLORIDE

CAS Nos. 107-06-2 EINECS Nos. 203-458-1  
1300-21-8 215-077-8

Empirical Formula:

$C_2H_2Cl_2$

Definition: Ethylene Dichloride is the halogenated aliphatic hydrocarbon that conforms to the formula:

$ClCH_2CH_2Cl$

Information Sources: 21CFR165.110, 21CFR172.560, 21CFR172.710, 21CFR172.864, 21CFR173.165, 21CFR173.230, 21CFR173.315, 21CFR175.105, 21CFR573.440, EEC(II-125), FCC, MI-12(3843), TSCA

Chemical Class: Halogen Compounds

Function: Not Reported

Technical/Other Names:

Dichloroethane  
Ethane, 1,2-Dichloro-

### ETHYLENE DIHYDROGENATED TALLOWAMIDE

Definition: Ethylene Dihydrogenated Tallowamide is the diamide that conforms generally to the formula:



where RCO- represents the fatty acids derived from hydrogenated tallow.

Chemical Class: Amides

Function: Viscosity Increasing Agent - Nonaqueous

Technical/Other Names:

N,N'-1,2-Ethanedithylbis(hydrogenated Tallowamide)  
(Hydrogenated Tallowamide), N,N'-1,2-Ethanedithylbis-

### ETHYLENE DILINOLEAMIDE

Definition: Ethylene Dilinoleamide is the condensation product of ethylenediamine with Dilinoleic Acid (q.v.).

Information Sources: JCIC, JCLS

Chemical Class: Amides

Function: Skin-Conditioning Agent - Miscellaneous

Technical/Other Name:

Condensate of Dilinoleic Acid and Ethylenediamine

### ETHYLENE DIOLEAMIDE

CAS No. 110-31-6 EINECS No. 203-756-1

The inclusion of any compound in the Dictionary and Handbook does not indicate that use of that substance as a cosmetic ingredient complies with the laws and regulations governing such use in the United States or any other country.

## **EXHIBIT 2**

**Certified Translation of French Priority Document**

## **EXHIBIT 3**

### **Pending Claims in Copending Applications**

UNITED STATES PATENT AND TRADEMARK OFFICE

I, Charles Edward SITCH BA,

Deputy Managing Director of RWS Group plc UK Translation Division, of Europa House, Marsham Way, Gerrards Cross, Buckinghamshire, England declare;

1. That I am a citizen of the United Kingdom of Great Britain and Northern Ireland.
2. That the translator responsible for the attached translation is well acquainted with the French and English languages.
3. That the attached is, to the best of RWS Group plc knowledge and belief, a true translation into the English language of the accompanying copy of the specification filed with the application for a patent in France on 24 January 2000 under the number 00/00,920 and the official certificate attached hereto.
4. That I believe that all statements made herein of my own knowledge are true and that all statements made on information and belief are true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application in the United States of America or any patent issuing thereon.



For and on behalf of RWS Group plc

The 24th day of February 2004



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# P A T E N T

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## UTILITY CERTIFICATE – CERTIFICATE OF ADDITION

### OFFICIAL COPY

The Director-General of the Institut National de la Propriété Industrielle certifies that the attached document is a true copy of an application for industrial property titleright filed at the Institute.

Drawn up in Paris, **17 NOV. 2000**

On behalf of the Director-General of the  
Institut National de la Propriété Industrielle  
The Patent Department Head

[signature]

Martine PLANCHE

---

INSTITUT	REGISTERED OFFICE
NATIONAL DE	26 bis, rue de Saint-Petersbourg
LA PROPRIÉTÉ	75800 PARIS Cédex 08
INDUSTRIELLE	Telephone: 01 53 04 53 04
	Fax: 01 42 93 59 30
	<a href="http://www.inpi.fr">http://www.inpi.fr</a>

# PATENT UTILITY CERTIFICATE

REQUEST FOR GRANT 2/2

SUBMISSION OF DOCUMENTS		Reserved for the INPI	
DATE		24 JAN.2000	
PLACE		75	
NATIONAL REGISTRATION No.		00/00,920	
ASSIGNED BY THE INPI			
Your file references: (optional)		OA00012/CL	
<b>6 REPRESENTATIVE</b>			
Name		LHOSTE	
Forename		Catherine	
Firm or Company		L'ORÉAL	
No. of permanent power of attorney and/or contractual arrangement		4412	
Street		6, rue Bertrand Sinholle	
Address			
Postcode and town		92585	CLICHY cedex
Telephone No. (optional)		01.47.56.77.60	
Fax No. (optional)		01.47.56.79.90	
E-mail address (optional)			
<b>7 INVENTOR (S)</b>			
The inventors are the applicants		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No In this case, provide a separate designation of the inventor(s)	
<b>8 SEARCH REPORT</b>		For a patent application only (including division and conversion)	
Immediate compilation		<input checked="" type="checkbox"/>	
Deferred compilation		<input type="checkbox"/>	
Fee paid in instalments		Payment in three instalments, for natural persons only <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>9 REDUCTION OF FEES</b>		For natural persons only <input type="checkbox"/> Requested for the first time for this invention (attach notice on non-application) <input type="checkbox"/> Requested prior to filing (attach copy of favourable decision for this invention or indicate its reference)	
If you used the "continuation" form, give the number of attached pages			
<b>10 SIGNATURE OF THE APPLICANT OR REPRESENTATIVE</b> (name and capacity of the signatory)		SIGNED FOR THE PREFECTURE OR THE INPI	
Catherine LHOSTE [signature]		P. BERNOUIS	



**REQUEST FOR GRANT 1/2**

This form is to be filled in legibly in black ink

DB 540 W / 260899

Reserved for the INPI		<div style="display: flex; justify-content: space-between;"> <div> <p><b>SUBMISSION OF DOCUMENTS</b></p> <p>DATE <b>24 JAN. 2000</b></p> <p>PLACE <b>75</b></p> <p>NATIONAL REGISTRATION No. <b>00/00,920</b></p> <p>ASSIGNED BY THE INPI</p> <p>DATE OF FILING ASSIGNED BY THE INPI <b>24 JAN. 2000</b></p> </div> <div> <p><b>1 NAME AND ADDRESS OF THE APPLICANT OR THE REPRESENTATIVE TO WHOM THE CORRESPONDENCE IS TO BE ADDRESSED</b></p> <p><b>L'ORÉAL</b> Catherine LHOSTE/DPI 6, rue Bertrand Sincholle 92585 CLICHY cedex</p> </div> </div>	
<p><b>Your file references:</b> (optional) <b>OA00012/CL</b></p>			
<p><b>Confirmation of filing by fax</b> <input checked="" type="checkbox"/> No. assigned by the INPI to the fax</p>			
<p><b>2 NATURE OF THE APPLICATION</b></p>		<p><b>Tick one of the 4 following boxes</b></p>	
<p>Patent application <input checked="" type="checkbox"/></p>			
<p>Utility certificate application <input type="checkbox"/></p>			
<p>Divisional application <input type="checkbox"/></p>			
<p style="text-align: right;"><i>Initial patent application</i></p> <p style="text-align: right;"><i>or initial utility certificate application</i></p>		<p>No. _____ Date <input type="text"/> / <input type="text"/> / <input type="text"/></p> <p>No. _____ Date <input type="text"/> / <input type="text"/> / <input type="text"/></p>	
<p>Conversion of a European patent application <i>Initial application</i></p>		<p><input type="checkbox"/> No. _____ Date <input type="text"/> / <input type="text"/> / <input type="text"/></p>	
<p><b>3 TITLE OF THE INVENTION (200 characters or spaces maximum)</b></p> <p><b>TRANSFER-RESISTANT COMPOSITION STRUCTURED IN RIGID FORM WITH A POLYMER</b></p>			
<p><b>4 PRIORITY DECLARATION OR APPLICATION FOR THE BENEFIT OF THE FILING DATE OF A PRIOR FRENCH APPLICATION</b></p>		<p>Country or organisation Date <input type="text"/> / <input type="text"/> / <input type="text"/> No. _____</p> <p>Country or organisation Date <input type="text"/> / <input type="text"/> / <input type="text"/> No. _____</p> <p>Country or organisation Date <input type="text"/> / <input type="text"/> / <input type="text"/> No. _____</p> <p><input type="checkbox"/> If there are other priorities, tick the box and use the "continuation" form</p>	
<p><b>5 APPLICANT</b></p>		<p><input type="checkbox"/> If there are other applicants, tick the box and use the "continuation" form</p>	
<p>Name or company name</p>		<p><b>L'ORÉAL</b></p>	
<p>Forenames</p>			
<p>Legal form</p>		<p><b>S.A.</b></p>	
<p>SIREN No.</p>		<p><input type="text"/></p>	
<p>APE-NAF Code</p>		<p><input type="text"/></p>	
<p>Street</p>		<p><b>14, rue Royale</b></p>	
<p>Address</p>			
<p>Postcode and town</p>		<p><b>75008 PARIS</b></p>	
<p>Country</p>		<p><b>FRANCE</b></p>	
<p>Nationality</p>		<p><b>French</b></p>	
<p>Telephone No. (optional)</p>		<p><b>01.47.56.77.60</b></p>	
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**PATENTS DIVISION**

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**DESIGNATION OF THE INVENTOR(S)** Page No. . 1 . / . 1  
(if the applicant is not the inventor or the sole inventor)

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<b>NATIONAL REGISTRATION NO.</b>		00/00,920	
<b>TITLE OF THE INVENTION</b> (200 characters or spaces maximum)  TRANSFER-RESISTANT COMPOSITION STRUCTURED IN RIGID FORM WITH A POLYMER			
<b>THE APPLICANT(S):</b>  L'ORÉAL 14, rue Royale 75008 PARIS			
<b>DESIGNATE(S) AS INVENTOR(S):</b> (Indicate top right "Page 1/1". If there are more than 3 inventors, use an identical form and number each page, indicating the total number of pages.)			
<b>Name</b>		FERRARI	
<b>Forenames</b>		Véronique	
<b>Address</b>	<b>Street</b>	12, rue Victor Hugo	
	<b>Postcode and town</b>	94700	MAISONS-ALFORT
<b>Employer company (optional)</b>			
<b>Name</b>			
<b>Forenames</b>			
<b>Address</b>	<b>Street</b>		
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<b>Forenames</b>			
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<b>DATE AND SIGNATURE(S) OF THE APPLICANT(S) OR OF THE REPRESENTATIVE</b> (Name and capacity of the signatory) 14 February 2000  Catherine LHOSTE		[signature]	

The present invention relates to a care composition and/or treatment composition and/or make-up composition for the skin, including the scalp, and/or for the lips of human beings, containing a liquid fatty phase comprising a volatile solvent, structured with a specific polymer. This composition is especially in the form of a stick of make-up and more especially of lipstick, and when applied it gives a noteworthy glossy, transfer-resistant deposit.

It is common to find a structured, i.e. gelled and/or rigidified, liquid fatty phase in cosmetic or dermatological products; this is especially the case in solid compositions such as deodorants, lip balms, lipsticks, concealer products and cast foundations. This structuring is obtained with the aid of waxes and/or fillers. Unfortunately, these waxes and fillers have a tendency to make the composition matt, which is not always desirable, in particular for a lipstick; specifically, women are always on the lookout for a lipstick in tube form which deposits a film which is more and more glossy.

For the purposes of the invention, the expression "liquid fatty phase" means a fatty phase which is liquid at room temperature (25°C), composed of one or more fatty substances that are liquid at room temperature, also referred to as oils, that are generally mutually compatible.

The structuring of the liquid fatty phase makes it possible in particular to limit its exudation from solid compositions, in particular in hot and humid regions, and in addition to limit, after deposition on the skin or the lips, the migration of this phase in wrinkles and fine lines, which is particularly desired for a lipstick. Specifically, large migration of the liquid fatty phase, in particular when it is charged with dyestuffs, leads to an unesthetic effect around the lips and the eyes, which particularly accentuates wrinkles and fine lines. This migration is often mentioned by women as being a major defect of conventional lipsticks.

The gloss is essentially associated with the nature of the liquid fatty phase. Thus, it is possible to reduce the content of waxes and/or fillers in the composition in order to increase the gloss of a lipstick, but in this case the migration of the liquid fatty phase increases. In other words, the content of waxes and of fillers required to prepare a stick of suitable hardness which does not exude at room temperature are a restricting factor on the gloss of the deposit.

The Applicant has found that the loss of gloss of a stick containing waxes is associated with the anisotropic crystal structure of these compounds. It is thus envisaged manufacturing a stick by reducing the content of wax and/or fillers.

Furthermore, most make-up compositions or care compositions, when applied to the skin, the eyelashes or the lips, have the drawback of transferring, i.e. of becoming at least partly deposited, leaving marks, on certain supports with which they may come into contact, and especially a glass, a cup, a cigarette, an item of clothing or the skin. This results in mediocre persistence of the film applied, making it necessary to regularly reapply the composition, especially a foundation or lipstick. However, users nowadays wish to achieve a beauty enhancement of their face, including the lips, and their body while spending as little time as possible doing so. Moreover, the appearance of these unacceptable marks, especially on shirt collars, may put certain women off using this type of make-up.

Cosmeticians have been interested for many years in "transfer-resistant" lipstick compositions and more recently in transfer-resistant foundation compositions. Thus, the company Shiseido has envisaged, in its patent application JP-A-61-65809, transfer-resistant lipstick compositions containing a siloxysilicate resin (with a three-dimensional network), a volatile silicone oil containing a cyclic silicone chain and pulverulent fillers. Similarly, the company Noevier has disclosed, in document JP-A-62-61911, transfer-resistant lipstick, eyeliner and foundation compositions comprising one or

more volatile silicones combined with one or more hydrocarbon-based waxes.

Although these compositions have improved transfer-resistance properties, they have the drawback of leaving on the lips, after the silicone oils have evaporated off, a film which becomes uncomfortable over time (sensation of drying out and of tautness), which puts a certain number of women off this type of lipstick. In addition, the film deposited is matt.

Moreover, the company Procter & Gamble has envisaged, in its patent application WP-A-96/40044, lipstick compositions with transfer-resistance properties, containing a volatile oil and a non-volatile oil, such as a perfluoropolyether, that are incompatible. Said application also discloses the improvement of the gloss by means of predispersing an oily phase in a matrix, and the ability of this oily phase to segregate out when the product is applied to the support and to migrate to the surface of the film thus deposited.

This system has the drawback of needing good dispersion of the oily phase in the matrix, and may give rise to problems of stability of the product that are associated with the necessary poor compatibility of the oily phase with the matrix (segregation of the composition in its packaging). Furthermore, the fluoro oils have the drawback of being difficult to formulate, in particular in

anhydrous media, thus limiting the range of cosmetic products that can be produced industrially.

The company Revlon has also envisaged, in document US-A-5 837 223, combining a fluorinated Guerbet ester with a siloxysilicate resin and volatile solvents such as cyclic silicones. The presence of siloxysilicate resin again leads to uncomfortable, matt films. Furthermore, the presence of fluoro oil makes the cosmetic products difficult to formulate. In patent US-A-5 849 275, the company Revlon has also envisaged combining a fluoro polymer with volatile solvents such as cyclic silicones. In this case also, the presence of fluoro compounds makes the cosmetic products difficult to formulate.

Patent application EP-A-0 775 483 from L'Oréal discloses liquid lipstick compositions containing an aqueous continuous medium comprising a polymer dispersion capable of forming a transfer-resistant, glossy continuous film on the lips. Unfortunately, these compositions lead to a film on the lips, that are constantly in movement, which is uncomfortable and gives a sensation of tautness. In addition, it is very difficult to introduce pigments into these compositions without destabilizing them.

Patent application EP-A-0 749 746 from L'Oréal discloses lipstick compositions containing a dispersion of polymer particles that are surface-stabilized with a polymer stabilizer. These compositions have the drawback

of containing only a small proportion of polar oils that are known to give sheen to the film deposited, in conventional compositions. In particular, the presence of a large proportion of polar oils (at least 5%) results in flocculation of the particles and thus instability over time of the compositions.

A need thus remains for a composition which does not have the above drawbacks, and which especially has noteworthy transfer-resistance properties, even in the case of a pronounced pressure or friction, good staying power over time, a glossy appearance, and it does not dry out the skin or the lips onto which it is applied, either during application or over time. Furthermore, this composition is stable over time, easy to manufacture and easy to introduce pigments therein.

A subject of the invention is, precisely, a care composition and/or make-up composition and/or treatment composition for the skin and/or the lips of the face and/or for superficial body growths, which overcomes the drawbacks mentioned above.

Surprisingly, the Applicant has found that the use of specific polymers combined with one or more volatile solvents allows a stick to be obtained which, when applied to the lips, gives a film with noteworthy cosmetic properties. In particular, the film is glossy, flexible, comfortable and transfer-resistant. Furthermore, the



composition is stable over time and does not exude at room temperature.

The term "stable" refers to a composition which does not exude at room temperature for at least 2 months, or even up to 9 months.

The invention applies not only to make-up products for the lips, such as lipsticks, lip glosses and lip pencils, but also to care and/or treatment products for the skin, including the scalp, and for the lips, such as antisen care products for the human face or the lips, especially in stick form make-up products for the skin, both of the human face and body, such as foundations optionally cast in stick or dish form, concealer products, eye shadows, transfer tattoos, body hygiene products such as deodorants especially in stick form, shampoos, conditioners and make-up products for the eyes such as eyeliners, eye pencils and mascaras more especially in cake form, as well as make-up and care products for the face, the body and keratin fibers such as the hair and the eyebrows.

More specifically, a subject of the invention is a structured composition containing at least one liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured with at least one polymer with a weight-average molecular mass ranging from 1 000 to 30 000, comprising a) a polymer skeleton having

hydrocarbon-based repeating units containing at least one hetero atom, and b) pendent and/or terminal fatty chains that are optionally functionalized, containing from 12 to 120 carbon atoms and being linked to these hydrocarbon-based units, the liquid fatty phase and the polymer forming a physiologically acceptable medium.

The composition of the invention advantageously contains no silicone resin containing siloxysilicate or trimethylated silica units, so as to preserve the comfort properties of the composition.

The composition of the invention can be in the form of a paste, a solid or a more or less viscous cream. It can be an oil-in-water or water-in-oil emulsion, or a rigid or soft anhydrous gel. In particular, it is in a form cast as a stick or a dish and more especially in the form of an anhydrous rigid gel, especially an anhydrous stick. More especially, it is in the form of a translucent or transparent rigid gel, the liquid fatty phase forming the continuous phase.

The gelation of the oil can be modified depending on the nature of the polymer containing a hetero atom used, and may be such that a rigid structure in the form of a tube or a stick is obtained. When these tubes are colored, they make it possible, after application, to obtain a uniformly colored and glossy deposit, which does not transfer, in particular onto a support placed in

contact with the film, after the volatile solvent has evaporated off and which has good staying power, in particular of the color over time.

The structuring polymer in the composition of the invention is a solid that is undeformable at room temperature (25°C). It is capable of structuring the composition without opacifying it.

For the purposes of the invention, the expression "functionalized chain" means an alkyl chain comprising one or more functional or reactive groups chosen in particular from hydroxyl, ether, oxyalkylene, polyoxyalkylene, halogen, including fluoro or perfluoro, ester, siloxane and polysiloxane groups. In addition, the hydrogen atoms of one or more fatty chains may be substituted at least partially with fluorine atoms.

For the purposes of the invention, the term "polymer" means a compound containing at least 2 repeating units.

For the purposes of the invention, the expression "hydrocarbon-based repeating units" means a unit containing from 2 to 80 carbon atoms and preferably from 2 to 60 carbon atoms, bearing hydrogen atoms and optionally oxygen atoms, which may be linear, branched or cyclic, and saturated or unsaturated. These units each also comprise one or more hetero atoms that are non-pendent and are in the polymer skeleton. These hetero atoms are chosen from

nitrogen, sulfur and phosphorus atoms and combinations thereof, optionally combined with one or more oxygen atoms.

These units containing a hetero atom are, in particular, amide units forming a skeleton of the polyamide type, carbamate and/or urea units forming a polyurethane, polyurea and/or polyurea-urethane skeleton. These units are preferably amide units. The pendent chains are advantageously linked directly to at least one of the hetero atoms of the polymer skeleton.

Between the hydrocarbon-based units, the polymer may comprise silicone units or oxyalkylene units.

In addition, the polymer in the composition of the invention advantageously comprises from 40% to 98% of fatty chains relative to the total number of units containing a hetero atom and of fatty chains, and better still from 50% to 95%. The nature and proportion of the units containing a hetero atom depends on the nature of the liquid fatty phase and is, in particular, similar to the nature of the fatty phase. Thus, the more the units containing a hetero atom are polar and in high proportion in the polymer, which corresponds to the presence of several hetero atoms, the greater the affinity of the polymer for polar oils. Conversely, the more non-polar, or even apolar, the units containing a hetero atom, or the lower the proportion thereof, the greater the affinity of

the polymer for apolar oils.

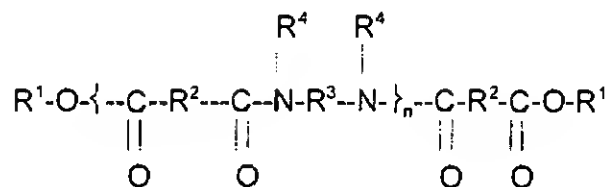
A subject of the invention is also a structured composition containing at least one liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured with at least one polyamide with a weight-average molecular mass ranging from 1 000 to 30 000, comprising a) a polymer skeleton containing amide repeating units, and b) optionally, pendent and/or terminal fatty chains that are optionally functionalized, containing from 12 to 120 carbon atoms and being linked to these amide units, the liquid fatty phase and the polymer forming a physiologically acceptable medium.

The pendent fatty chains are preferably linked to at least one of the nitrogen atoms of the amide units.

In particular, the fatty chains of this polyamide represent from 40% to 98% of the total number of amide units and of fatty chains, and better still from 50% to 95%.

As preferred structuring polymers which may be used in the invention, mention may be made of polyamides branched with pendent fatty chains and/or terminal fatty chains containing from 12 to 120 carbon atoms and in particular from 12 to 68 carbon atoms, the terminal fatty chains being linked to the polyamide skeleton via ester groups. These polymers are more especially the ones disclosed in document US-A-5 783 657 from Union Camp. Each

of these polymers in particular satisfies formula (I) below:



in which  $n$  denotes a number of amide units such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups;  $\text{R}^1$  is, independently in each case, an alkyl or alkenyl group containing at least 4 carbon atoms;  $\text{R}^2$  represents, independently in each case, a  $\text{C}_4$  to  $\text{C}_{42}$  hydrocarbon-based group, on condition that 50% of the groups  $\text{R}^2$  represent a  $\text{C}_{30}$  to  $\text{C}_{42}$  hydrocarbon-based group;  $\text{R}^3$  represents, independently in each case, an organic group containing at least 2 carbon atoms, hydrogen atoms and optionally one or more oxygen or nitrogen atoms; and  $\text{R}^4$  represents, independently in each case, a hydrogen atom, a  $\text{C}_1$  to  $\text{C}_{10}$  alkyl group or a direct bond to  $\text{R}^3$  or to another  $\text{R}^4$ , such that the nitrogen atom to which both  $\text{R}^3$  and  $\text{R}^4$  are attached forms part of a heterocyclic structure defined by  $\text{R}^4\text{-N-R}^3$ , with at least 50% of the groups  $\text{R}^4$  representing a hydrogen atom.

In particular, the ester groups of formula (I), which form part of the terminal and/or pendent fatty

chains for the purposes of the invention, represent from 15% to 40% of the total number of ester and amide groups and better still from 20% to 35%. Furthermore,  $n$  is advantageously an integer ranging from 1 to 5. Preferably,  $R^1$  is a  $C_{12}$  to  $C_{22}$  and preferably  $C_{16}$  to  $C_{22}$  alkyl group. Advantageously,  $R^2$  can be a  $C_{10}$  to  $C_{42}$  hydrocarbon-based (in particular alkyl or alkenyl) group having a fatty acid structure which is polymerized or dimeric, the carboxylic acid groups of which have been removed (these groups being used for the formation of the amide). Preferably, at least 50% and better still 75% of the groups  $R^2$  are groups containing from 30 to 42 carbon atoms. The other groups  $R^2$  are  $C_4$  to  $C_{19}$  and better still  $C_4$  to  $C_{12}$  hydrogen-containing groups. Preferably,  $R^3$  represents a  $C_2$  to  $C_{36}$  hydrocarbon-based group or a polyoxyalkylene group and  $R^4$  represents a hydrogen atom. Preferably,  $R^3$  represents a  $C_2$  to  $C_{12}$  hydrocarbon-based group. The hydrocarbon-based groups may be linear, cyclic or branched, saturated or unsaturated groups. Moreover, the alkyl and alkenyl groups may be linear or branched groups.

The polymer in the composition of the invention advantageously comprises a weight-average molecular mass ranging from 2 000 to 20 000 and better still from 2 000 to 10 000.

According to the invention, the structuring of the liquid fatty phase is obtained with the aid of one or more

polymers of formula (I). In general, the polymers of formula (I) are in the form of mixtures of polymers, these mixtures also possibly containing a synthetic product such that  $n$  is 0, i.e. a diester.

As examples of structuring polymers which can be used in the composition according to the invention, mention may be made of the commercial products sold by Bush Boake Allen under the names Uniclear 80 and Uniclear 100. They are sold, respectively, in the form of an 80% (in terms of active material) gel in a mineral oil and a 100% (in terms of active material) gel. They have a softening point of from 88°C to 94°C. These commercial products are a mixture of copolymers of a  $C_{36}$  diacid coupled with ethylenediamine, having an average molecular mass of about 6 000. Moreover, the remaining acid endings are esterified with cetylstearyl alcohol.

As structuring polymers which can be used in the invention, mention may also be made of polyamide resins resulting from the condensation of an aliphatic dicarboxylic acid and a diamine (including compounds containing more than 2 carbonyl groups and 2 amine groups), the carbonyl and amine groups of adjacent individual units being condensed via an amide bond. These polyamide resins are, in particular, those sold under the brand name Versamid® by General Mills Inc. and Henkel Corp. (Versamid 930, 744 or 1655) or by the company Olin



Mathieson Chemical Corp. under the brand name Onamid<sup>®</sup>, in particular Onamid S or C. These resins have a weight-average molecular mass ranging from 6 000 to 9 000. For further information regarding these polyamides, reference may be made to the documents US-A-3 645 705 and US-A-3 148 125. More especially, Versamid<sup>®</sup> 930 or 744 is used.

The polyamides sold by Union Camp Corp. under the references Uni-Rez (2658, 2931, 2970, 2621, 2613, 2624, 2665, 1554, 2623 and 2662) and the product sold under the reference Macromelt 6212 by the company Henkel may also be used. For further information regarding these polyamides, reference may be made to document US-A-5 500 209.

The structuring polymers in the composition of the invention advantageously have a softening point of greater than 70°C, which may be up to 190°C. They preferably have a softening point ranging from 80°C to 130°C. These polymers are, in particular, non-waxy polymers.

The polymer is advantageously combined with at least one amphiphilic compound that is liquid and nonvolatile at room temperature, having a hydrophilic/lipophilic balance (HLB) of less than 12 and in particular ranging from 1 to 8 and preferably from 1 to 5. According to the invention, one or more amphiphilic compounds may be used. The aim of these amphiphilic compounds is to reinforce the structuring properties of

the polymer containing a hetero atom, to facilitate the use of the polymer and to improve the ability of the stick to be deposited.

According to the invention, the composition can have a hardness ranging from 20 N to 600 N and better still from 150 N to 450 N. This hardness may be measured according to a method of penetration of a probe into said composition and in particular using a texture analyzer (for example TA-XT2 from Rhéo) equipped with an ebonite cylinder 5 mm long and 8 mm in diameter. The hardness measurement is carried out at 20°C at the center of 5 samples of said composition. The cylinder is introduced into each composition sample at a pre-speed of 2 mm/s, then at a speed of 0.5 mm/s and finally at a post-speed of 2 mm/s, the total displacement being 1 mm. The hardness value taken is that of the maximum peak.

The hardness may also be measured by the so-called cheese wire method, which consists in cutting a stick of lipstick 8.1 mm in diameter and in measuring the hardness at 20°C using a DFGHS 2 tensile testing machine from Indelco-Chatillon, traveling at a speed of 100 mm/minute. It is expressed as the shear force (expressed in grams) required to cut a stick under these conditions. According to this method, the hardness of a composition in stick form according to the invention ranges from 30 g to 50 g. This hardness is very different from those of the stick

compositions of the prior art containing waxes, which ranges from 60 g to 120 g.

The hardness of the composition according to the invention is such that the composition is self-supporting and can disintegrate easily to form a satisfactory deposit on the skin and/or the lips and/or superficial body growths. In addition, with this hardness, the composition of the invention has good impact strength.

According to the invention, the composition in stick form has the behavior of a deformable, flexible elastic solid, giving noteworthy elastic softness on application. The compositions in stick form of the prior art do not have this property of elasticity and flexibility.

The amphiphilic compound(s) which can be used in the composition of the invention comprise a lipophilic part linked to a polar part, the lipophilic part comprising a carbon-based chain containing at least 8 carbon atoms, in particular from 18 to 32 carbon atoms and better still from 18 to 28 carbon atoms. The polar part of this or these amphiphilic compound(s) is preferably the residue of a compound chosen from alcohols and polyols containing from 1 to 12 hydroxyl groups, and polyoxyalkylenes comprising at least 2 oxyalkylene units and containing from 0 to 20 oxypropylene units and/or from 0 to 20 oxyethylene units. In particular, the amphiphilic

compound is an ester chosen from the hydroxystearates, oleates and isostearates of glycerol, of sorbitan and of methylglucose, or alternatively branched  $C_{12}$  to  $C_{26}$  fatty alcohols such as octyldodecanol, and mixtures thereof. Among these esters, monoesters and mixtures of mono- and diesters are preferred.

The content of amphiphilic compound and of polymer containing a hetero atom are chosen according to the desired gel hardness and as a function of the specific application envisaged. The respective amounts of polymer and of amphiphilic compound should be such that they produce a stick which can be worn down. In practice, the amount of polymer represents from 0.5% to 80% of the total weight of the composition, and better still from 5% to 40%. The amount of amphiphilic compound in practice represents from 0.1% to 35% of the total weight of the composition, and better still from 1% to 15%, if it is present.

The liquid fatty phase of the composition advantageously contains more than 40% of liquid oil(s) containing a group similar to that of the units containing a hetero atom, and better still from 50% to 100%. In particular, the liquid fatty phase structured with a polyamide-type skeleton contains a major quantity, i.e. greater than 40% relative to the total weight of the liquid fatty phase and better still from 50% to 100%, of

apolar liquid oil or mixture of oils and more especially hydrocarbon-based oil(s).

For a liquid fatty phase structured with a polymer containing a partially silicone-based skeleton, this fatty phase preferably contains more than 40% relative to the total weight of the liquid fatty phase, and better still from 50% to 100% of silicone-based liquid oil or mixture of oils, relative to the total weight of the liquid fatty phase.

For a liquid fatty phase structured with an apolar polymer of the hydrocarbon-based type, this fatty phase advantageously contains more than 40% by weight, and better still from 50% to 100%, of liquid apolar, and in particular hydrocarbon-based, oil or mixture of oils, relative to the total weight of the liquid fatty phase.

In particular, the polar oils of the invention are:

- hydrocarbon-based plant oils with a high content of triglycerides consisting of fatty acid esters of glycerol in which the fatty acids may have varied chain lengths from  $C_4$  to  $C_{24}$ , these chains possibly being linear or branched, and saturated or unsaturated; these oils are, in particular, wheat germ oil, corn oil, sunflower oil, karite butter, castor oil, sweet almond oil, macadamia oil, apricot oil, soybean oil, cotton oil, alfalfa oil, poppy oil, pumpkin oil, sesame oil, marrow oil, rape seed

oil, avocado oil, hazelnut oil, grape seed oil or blackcurrant seed oil, evening primrose oil, millet oil, barley oil, quinoa oil, olive oil, rye oil, safflower oil, candlenut oil, passion flower oil and musk rose oil; or alternatively caprylic/capric acid triglycerides such as those sold by Stearineries Dubois or those sold under the names Miglyol 810, 812 and 818 by Dynamit Nobel;

- synthetic oils or esters of formula  $R_5COOR_6$  in which  $R_5$  represents a linear or branched fatty acid residue containing from 1 to 40 carbon atoms and  $R_6$  represents an in particular branched hydrocarbon-based chain containing from 1 to 40 carbon atoms, with the proviso that  $R_5 + R_6 \geq 10$ , such as, for example, purcellin oil (cetostearyl octanoate), isononyl isononanoate,  $C_{12}$ - $C_{15}$  alkyl benzoate, isopropyl myristate, 2-ethylhexyl palmitate, isostearyl isostearate, and alkyl or polyalkyl octanoates, decanoates or ricinoleates; hydroxylated esters such as isostearyl lactate and diisostearyl malate; and pentaerythritol esters;

- synthetic ethers containing from 10 to 40 carbon atoms;
- $C_8$  to  $C_{26}$  fatty alcohols such as oleyl alcohol;
- mixtures thereof.

The apolar oils according to the invention are, in particular, silicone oils such as volatile or nonvolatile, linear or cyclic polydimethylsiloxanes (PDMSs) that are liquid at room temperature; polydimethylsiloxanes

comprising alkyl, alkoxy or phenyl groups which are pendent and/or at the end of the silicone chain, the groups containing from 2 to 24 carbon atoms; phenylsilicones such as phenyltrimethicones, phenyldimethicones, phenyltrimethylsiloxyl-diphenylsiloxanes, diphenyldimethicones, diphenyl-methyldiphenyltrisiloxanes and 2-phenylethyltrimethyl-siloxysilicates; linear or branched hydrocarbons of synthetic or mineral origin, such as volatile liquid paraffins or nonvolatile liquid paraffins and derivatives thereof, petroleum jelly, liquid lanolin, polydecenes, hydrogenated polyisobutene such as parleam, and squalane, and mixtures thereof. The structured oils, and more especially those structured with polyamides and in particular those of formula (I) or the polyurethanes or polyureas or polyurea-urethanes, are preferably apolar oils and more especially an oil or a mixture of oils of the hydrocarbon-based type of mineral or synthetic origin, chosen in particular from hydrocarbons, especially alkanes such as parleam oil, isoparaffins such as isododecane, and squalane, and mixtures thereof. These oils are advantageously combined with one or more phenylsilicone oils.

The liquid fatty phase preferably contains at least one nonvolatile oil chosen in particular from hydrocarbon-based oils of mineral, plant or synthetic

origin, synthetic esters or ethers and silicone oils, and mixtures thereof.

In practice, the total liquid fatty phase represents from 5% to 99% relative to the total weight of the composition, preferably from 20% to 75%.

The liquid fatty phase in the composition according to the invention also contains at least one volatile solvent, i.e. one or more volatile solvents.

For the purposes of the invention, the expression "volatile solvent" means any nonaqueous medium capable of evaporating on contact with the skin or the lips in less than one hour at room temperature and atmospheric pressure. The volatile solvent(s) of the invention is(are) organic solvents and in particular volatile cosmetic oils that are liquid at room temperature, having a non-zero vapor pressure, at room temperature and atmospheric pressure, ranging in particular from  $10^{-3}$  to 300 mmHg and preferably greater than 0.3 mmHg.

According to the invention, these volatile solvents facilitate, in particular, the application of the composition to the skin, the lips or superficial body growths. These solvents may be hydrocarbon-based solvents, silicone solvents optionally comprising alkyl or alkoxy groups that are pendent or at the end of a silicone chain, or a mixture of these solvents. Preferably, these solvents are not monoalcohols containing at least 7 carbon atoms.



As volatile solvents which can be used in the invention, mention may be made of linear or cyclic silicone oils having a viscosity at room temperature of less than 8 cSt and in particular containing from 2 to 7 silicon atoms, these silicones optionally comprising alkyl or alkoxy groups containing from 1 to 10 carbon atoms. As volatile silicone oils which may be used in the invention, mention may be made in particular of octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, dodecamethylcyclohexasiloxane, heptamethylhexyltrisiloxane, heptamethyloctyltrisiloxane, hexamethyldisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane and dodecamethylpentasiloxane, and mixtures thereof.

As other volatile solvents which may be used in the invention, mention may be made of hydrocarbon-based volatile oils containing from 8 to 16 carbon atoms, and mixtures thereof, and in particular branched  $C_8$ - $C_{16}$  alkanes such as  $C_8$ - $C_{16}$  isoalkanes (also known as isoparaffins), isododecane, isodecane, isohexadecane and, for example, the oils sold under the trade names "Isopars" or "Permetyls", and branched  $C_8$ - $C_{16}$  esters such as isohexyl neopentanoate, and mixtures thereof. The volatile solvent is preferably chosen from hydrocarbon-based volatile oils containing from 8 to 16 carbon atoms, and mixtures thereof.

Volatile fluoro solvents may also be used.

Isododecane (Permetyls 99 A) and  $C_8-C_{16}$  isoparaffins (Isopars L, E, H) and mixtures thereof, optionally combined with decamethyltetrasiloxane, are preferably used.

These volatile oils in particular represent a mass content of from 5% to 97.5% relative to the total weight of the composition, preferably from 10% to 75% and better still from 15% to 45%. In general, the amount of volatile solvent used is an amount which is sufficient to obtain transfer-resistance properties. This amount will be adapted by a person skilled in the art according to the desired intensity of the transfer-resistance properties.

The composition of the invention can also comprise any additive usually used in the field under consideration, chosen in particular from dyestuffs, antioxidants, essential oils, preserving agents, fragrances, fillers, waxes, products that are pasty at room temperature, neutralizing agents, liposoluble polymers or polymers that are dispersible in the medium, cosmetic or dermatological active agents such as, for example, emollients, moisturizers, vitamins, essential fatty acids, sunscreens, dispersants such as poly(12-hydroxystearic acid), and mixtures thereof. These additives may be present in the composition in a proportion of from 0% to 20% (in particular from 0.01% to

20%) relative to the total weight of the composition and better still from 0.01% to 10%. The composition advantageously contains at least one cosmetic or dermatological active agent.

The composition of the invention can also contain, as additive, an aqueous phase containing water that is optionally thickened or gelled with an aqueous-phase thickener or gelling agent and optionally water-miscible compounds.

Needless to say, a person skilled in the art will take care to select the optional additional additives and/or the amount thereof such that the advantageous properties of the composition according to the invention are not, or are not substantially, adversely affected by the envisaged addition.

The composition according to the invention can be in the form of a tinted dermatological composition or a care composition for keratin materials such as the skin, the lips and/or superficial body growths, in the form of an antisen composition or body hygiene composition in particular in the form of a deodorant product or make-up-removing product in stick form. It can be used in particular as a care base for the skin, superficial body growths or the lips (lip balms, for protecting the lips against cold and/or sunlight and/or the wind, or care cream for the skin, the nails or the hair).

The composition of the invention may also be in the form of a colored make-up product for the skin, in particular a foundation, optionally having care or treating properties, a blusher, a face powder, an eye shadow, a concealer product, an eyeliner, a make-up product for the body; a make-up product for the lips such as a lipstick, optionally having care or treating properties; a make-up product for superficial body growths such as the nails or the eyelashes, in particular in the form of a mascara cake, or for the eyebrows and the hair, in particular in the form of a pencil.

Needless to say, the composition of the invention should be cosmetically or dermatologically acceptable, i.e. it should contain a nontoxic physiologically acceptable medium and should be able to be applied to the skin, superficial body growths or the lips of human beings. For the purposes of the invention, the expression "cosmetically acceptable" means a composition of pleasant appearance, odor and feel.

The composition advantageously contains at least one cosmetic active agent and/or one dermatological active agent and/or at least one dyestuff. By means of the combination of at least one volatile solvent and of at least one polymer with a weight-average molecular mass ranging from 1 000 to 30 000, as defined above, trapping of the active agents and dyestuffs present in the

composition is obtained, making it possible to keep them where they were applied, i.e. on the lips, the skin or superficial body growths such as keratin fibers, after the volatile solvent(s) has(have) evaporated off, and to limit their transfer or redeposition onto a support other than the one to which they were applied.

The dyestuff according to the invention may be chosen from the lipophilic dyes, hydrophilic dyes, pigments and naces usually used in cosmetic or dermatological compositions, and mixtures thereof. This dyestuff is generally present in a proportion of from 0.01% to 50% relative to the total weight of the composition, preferably from 5% to 30%, if it is present.

The liposoluble dyes are, for example, Sudan Red, D&C Red 17, D&C Green 6,  $\beta$ -carotene, soybean oil, Sudan Brown, D&C Yellow 11, D&C Violet 2, D&C Orange 5 or quinoline yellow. They can represent from 0.1% to 20% of the weight of the composition and better still from 0.1% to 6%.

The pigments may be white or colored, mineral and/or organic, and coated or uncoated. Among the mineral pigments which may be mentioned are titanium dioxide, optionally surface-treated, zirconium oxide or cerium oxide, as well as iron oxide, chromium oxide, manganese violet, ultramarine blue, chromium hydrate and ferric blue. Among the organic pigments which may be mentioned

are carbon black, pigments of D & C type, and lakes based on cochineal carmine or on barium, strontium, calcium or aluminum. The pigments can represent from 0.1% to 50% and better still from 2% to 30% relative to the total weight of the composition, if they are present.

The nacreous pigments may be chosen from white nacreous pigments such as mica coated with titanium or with bismuth oxychloride, colored nacreous pigments such as titanium mica with iron oxides, titanium mica with, in particular, ferric blue or chromium oxide, titanium mica with an organic pigment of the type mentioned above, as well as nacreous pigments based on bismuth oxychloride. They can represent from 0.1% to 20% relative to the total weight of the composition, and better still from 0.1% to 15%, if they are present.

The composition can optionally contain one or more waxes to improve the structuring in stick form, although this rigid form can be obtained in the absence of wax. For the purposes of the present invention, a wax is a lipophilic fatty compound that is solid at room temperature (25°C), which undergoes a reversible solid/liquid change of state, having a melting point of greater than 40°C which may be up to 200°C, and having an anisotropic crystal organization in the solid state. The size of the crystals is such that the crystals diffract and/or scatter light, giving the composition a cloudy,

more or less opaque appearance. By bringing the wax to its melting point, it is possible to make it miscible with oils and to form a microscopically homogeneous mixture, but on returning the temperature of the mixture to room temperature, recrystallization of the wax in the oils of the mixture is obtained. It is this recrystallization in the mixture which is responsible for the reduction in the gloss of said mixture. Thus, the composition advantageously contains little or no wax, and in particular less than 5% wax.

For the purposes of the invention, the waxes are those generally used in cosmetics and dermatology; they are especially of natural origin, for instance beeswax, carnauba wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, paraffin wax, lignite wax, microcrystalline waxes, lanolin wax, montan wax, ozokerites and hydrogenated oils such as hydrogenated jojoba oil as well as waxes of synthetic origin, for instance polyethylene waxes derived from the polymerization of ethylene, waxes obtained by Fischer-Tropsch synthesis, fatty acid esters and glycerides that are solid at 40°C, silicone waxes such as alkyl- and alkoxy-poly(di)methylsiloxanes and/or poly(di)methylsiloxane esters that are solid at 40°C.

The composition of the invention also advantageously contains at least one polymer that is

liposoluble or dispersible in the medium, especially having an average molecular weight of from 500 to 1 000 000 and better still from 5 000 to 15 000. This(these) liposoluble polymer(s) contribute(s) in particular toward increasing the viscosity and/or improving the staying power of the film. These liposoluble polymers advantageously have a softening point of not more than 30°C.

As examples of liposoluble polymers which can be used in the invention, mention may be made of: polyalkylenes, in particular polybutene, poly(meth)acrylates, alkylcelluloses with a linear or branched, saturated or unsaturated C<sub>1</sub> to C<sub>8</sub> alkyl radical, such as ethylcellulose and propylcellulose, silicone polymers that are compatible with the fatty phase, as well as vinylpyrrolidone (VP) copolymers, and mixtures thereof.

Vinylpyrrolidone copolymers, copolymers of a C<sub>2</sub> to C<sub>30</sub> and better still C<sub>3</sub> to C<sub>22</sub> alkene, and combinations thereof, are preferably used. As examples of VP copolymers which can be used in the invention, mention may be made of VP/vinyl acetate, VP/ethyl methacrylate, butylated polyvinylpyrrolidone (PVP), VP/ethyl methacrylate/methacrylic acid, VP/eicosene, VP/hexadecene, VP/triacontene, VP/styrene or VP/acrylic acid/lauryl methacrylate copolymer.

Preferably, not only for the staying power



properties but also the feel and consistency properties of the film, the PVP/hexadecene copolymer having an average molecular weight of from 7 000 to 7 500 or alternatively the PVP/eicosene copolymer having an average molecular weight of from 8 000 to 9 000 is used.

The liposoluble or dispersible polymers in the composition of the invention are advantageously used in an amount of from 0.01% to 20% (as active material) relative to the total weight of the composition and better still from 1% to 10%, if they are present.

The composition according to the invention also advantageously contains at least one fatty compound that is pasty at room temperature. For the purposes of the invention, the expression "pasty fatty substances" means fatty substances with a melting point ranging from 20°C to 55°C, preferably 25°C to 45°C, and/or a viscosity at 40°C ranging from 0.1 to 40 Pa.s (1 to 400 poises), preferably 0.5 to 25 Pa.s, measured using a Contraves TV or Rhéomat 80 viscometer, equipped with a spindle rotating at 60 Hz. A person skilled in the art can select the spindle for measuring the viscosity from the spindles MS-r3 and MS-r4, on the basis of his general knowledge, so as to be able to carry out the measurement of the pasty compound tested.

According to the invention, one or more pasty fatty substances are used. These fatty substances are preferably hydrocarbon-based compounds, optionally of

polymeric type; they can also be chosen from silicone compounds and/or fluoro compounds; they may also be in the form of a mixture of hydrocarbon-based compounds and/or silicone compounds and/or fluoro compounds. In the case of a mixture of different pasty fatty substances, the hydrocarbon-based pasty compounds are preferably used in major proportion.

Among the pasty compounds which may be used in the composition according to the invention, mention may be made of lanolins and lanolin derivatives such as acetylated lanolins or oxypropylenated lanolins, having a viscosity of from 18 to 21 Pa.s, preferably 19 to 20.5 Pa.s, and/or a melting point of from 30°C to 55°C, and mixtures thereof. It is also possible to use esters of fatty acids or of fatty alcohols, in particular those containing from 20 to 65 carbon atoms (melting point of about from 20°C to 35°C and/or viscosity at 40°C ranging from 0.1 to 40 Pa.s), such as triisostearyl or cetyl citrate; arachidyl propionate; polyvinyl laurate; cholesterol esters, such as triglycerides of plant origin, such as hydrogenated plant oils, viscous polyesters such as poly(12-hydroxystearic acid), and mixtures thereof. Triglycerides of plant origin which may be used are hydrogenated castor oil derivatives, such as "Thixinr" from Rheox.

Mention may also be made of pasty silicone fatty

substances such as polydimethylsiloxanes (PDMSs) containing pendent chains of the alkyl or alkoxy type containing from 8 to 24 carbon atoms, and having a melting point of 20-55°C, such as stearyldimethicones, in particular those sold by Dow Corning under the trade names DC2503 and DC25514, and mixtures thereof.

The pasty fatty substance(s) may be present in a proportion of from 0.1% to 60% by weight, relative to the total weight of the composition, preferably in a proportion of from 1% to 45% by weight, and even more preferably in a proportion of from 2% to 30% by weight, in the composition, if they are present.

The composition according to the invention may be manufactured by the known processes, that are generally used in cosmetics or dermatology. It may be manufactured by the process which consists in heating the polymer at least to its softening point, in adding the amphiphilic compound(s), the dyestuffs and the additives thereto and then in mixing everything together until a clear, transparent solution is obtained. After reducing the temperature, the volatile solvent(s) is(are) then added to the mixture obtained. The homogeneous mixture obtained can then be cast in a suitable mold such as a lipstick mold or directly into the packaging articles (case or dish in particular).

A subject of the invention is also a lipstick

composition in stick form containing at least one continuous liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured with at least one non-waxy polymer giving the composition the appearance of a deformable elastic solid with a hardness ranging from 30 g to 50 g, in the absence of wax.

This lipstick composition in stick form advantageously contains an additive chosen from fatty compounds that are pasty at room temperature, liposoluble polymers and mixtures thereof, as defined previously. The non-waxy polymer is preferably a polymer whose skeleton comprises hydrocarbon-based units containing a hetero atom, as defined previously.

A subject of the invention is also a cosmetic care, make-up or treatment process for the keratin materials of human beings, and in particular of the skin, the lips and superficial body growths, comprising the application to the keratin materials of the composition, in particular the cosmetic composition, as defined above.

A subject of the invention is also the use of the combination of at least one volatile solvent and of at least one polymer with a weight-average molecular mass ranging from 1 000 to 30 000, comprising a) a polymer skeleton containing hydrocarbon-based repeating units containing at least one hetero atom, and b) optionally pendent and/or terminal fatty chains that are optionally

functionalized, containing from 12 to 120 carbon atoms and being linked to these hydrocarbon-based units, in a cosmetic composition or for the manufacture of a physiologically acceptable composition, in order to reduce the transfer and/or deposit of traces of a film of said composition, applied to the keratin materials, onto a support placed in contact with said film and/or to improve the staying power of said film. This film is also glossy and/or comfortable to wear.

The invention is illustrated in greater detail in the examples which follow. The percentages are given on a weight basis.

**Example 1: Lipstick***Phase A*

• Uniclear 100	18%
• Castor oil	7%
• Hydrogenated isoparaffin	4%
• Isononyl isononanoate	4%
• Phenyltrimethylsiloxyltrisiloxane	8%
• Vinylpyrrolidone/1-eicosene copolymer	2%

*Phase B*

• Pigments	10%
• Hydrogenated isoparaffin	5%
• Liquid lanolin	5%
• Poly(12-hydroxystearic acid)	2%

*Phase C*

• Isododecane	25%
• Decamethyltetrasiloxane	10%

The pigment phase (B) is ground using a three-roll mill and introduced into the oily phase A preheated to 100°C, until the mixture is fully homogenized. The volatile phase C is then added to the above mixture, cooled to 85°C. The resulting mixture is left in contact for 10 min and then cast into lipstick molds.

The lipstick obtained deposits a glossy, transfer-resistant film. This lipstick was judged by testers to be

equal in staying power and transfer-resistance properties to those of a transfer-resistant lipstick of the prior art as described in Example 1 of document EP-A-0 847 752, but glossier than the prior art lipstick. This known lipstick contained:

• PDMS (100 Cst)	8%
• Hydrogenated polyisobutene	18%
• Arachidyl propionate	7.5%
• Polyethylene wax	16.5%
• Pigments/nacres	11%
• Isododecane	qs 100%

#### **Example 2: Lipstick**

##### *Phase A*

• Uniclear 100	18%
• Castor oil	8%
• Hydrogenated isoparaffin	5%
• Isononyl isononanoate	5%
• Phenyltrimethylsiloxyltrisiloxane	8%
• Vinylpyrrolidone/1-eicosene copolymer	2%

##### *Phase B*

• Pigments	10%
• Hydrogenated isoparaffin	5%
• Liquid lanolin	5%
• Poly(12-hydroxystearic acid)	2%

*Phase C*

- Isododecane 27%
- Decamethyltetrasiloxane 5%

The pigment phase (B) is ground using a three-roll mill and introduced into the oily phase A preheated to 100°C, until the mixture is fully homogenized. The volatile phase C is then added to the above mixture, cooled to 85°C. The resulting mixture is left in contact for 10 min and then cast into lipstick molds.

The lipstick obtained deposits a glossy, transfer-resistant film. This lipstick was judged by a panel of testers to be equal in staying power and transfer-resistance properties to those of a transfer-resistant lipstick of the prior art as described in Example 1 of document EP-A-0 847 752, but glossier than the prior art lipstick.



**CLAIMS**

1. A structured composition containing at least one liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured with at least one polymer with a weight-average molecular mass ranging from 1 000 to 30 000, comprising a) a polymer skeleton having hydrocarbon-based repeating units containing at least one hetero atom, and b) pendent and/or terminal fatty chains that are optionally functionalized, containing from 12 to 120 carbon atoms and being linked to these hydrocarbon-based units, the liquid fatty phase and the polymer forming a physiologically acceptable medium.

2. A composition as claimed in claim 1, wherein the units containing a hetero atom are amides.

3. A composition as claimed in claim 1 or 2, wherein the fatty chains represent from 40% to 98% of the total number of units containing a hetero atom and of fatty chains.

4. A composition as claimed in one of the preceding claims, wherein the fatty chains represent from 50% to 95% of the total number of units containing a hetero atom and of fatty chains.

5. A composition as claimed in one of the preceding claims, wherein the pendent fatty chains are linked directly to at least one of said hetero atoms.

6. A structured composition containing at least one liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured with at least one polyamide with a weight-average molecular mass ranging from 1 000 to 30 000, comprising a) a polymer skeleton containing amide repeating units, and b) optionally, pendent and/or terminal fatty chains that are optionally functionalized, containing from 12 to 120 carbon atoms and being linked to these amide units, the liquid fatty phase and the polymer forming a physiologically acceptable medium.

7. A composition as claimed in the preceding claim, wherein the fatty chains represent from 40% to 98% of the total number of amide units and of fatty chains.

8. A composition as claimed in claim 6 or 7, wherein the fatty chains represent from 50% to 95% of the total number of amide units and of fatty chains.

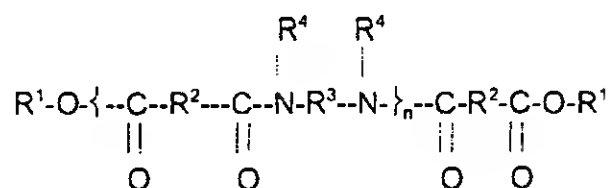
9. A composition as claimed in one of claims 6 to 8, wherein the pendent fatty chains are linked directly to at least one of the nitrogen atoms of the amide units.

10. A composition as claimed in one of the preceding claims, wherein the weight-average molar mass ranges from 2 000 to 20 000 and better still from 2 000 to 10 000.

11. A composition as claimed in one of the preceding claims, wherein the terminal fatty chains are linked to the skeleton via ester groups.

12. A composition as claimed in one of the preceding claims, wherein the fatty chains contain from 12 to 68 carbon atoms.

13. A composition as claimed in one of the preceding claims, wherein the polymer is chosen from the polymers of formula (I) below, and mixtures thereof:



in which n denotes a number of amide units such that the number of ester groups represents from 10% to 50% of the total number of ester and amide groups;  $\text{R}^1$  is, independently in each case, an alkyl or alkenyl group containing at least 4 carbon atoms;  $\text{R}^2$  represents, independently in each case, a  $\text{C}_4$  to  $\text{C}_{42}$  hydrocarbon-based group, on condition that 50% of the groups  $\text{R}^2$  represent a  $\text{C}_{30}$  to  $\text{C}_{42}$  hydrocarbon-based group;  $\text{R}^3$  represents, independently in each case, an organic group containing at least 2 carbon atoms, hydrogen atoms and optionally one or more oxygen or nitrogen atoms; and  $\text{R}^4$  represents, independently in each case, a hydrogen atom, a  $\text{C}_1$  to  $\text{C}_{10}$

alkyl group or a direct bond to  $R^3$  or another  $R^4$ , such that the nitrogen atom to which both  $R^3$  and  $R^4$  are attached forms part of a heterocyclic structure defined by  $R^4-N-R^3$ , with at least 50% of the groups  $R^4$  representing a hydrogen atom.

14. A composition as claimed in the preceding claim, wherein  $R^1$  is a  $C_{12}$  to  $C_{22}$  alkyl group.

15. A composition as claimed in either of claims 13 and 14, wherein  $R^2$  are groups containing from 30 to 42 carbon atoms.

16. A composition as claimed in one of the preceding claims, wherein the polymer represents from 0.5% to 80% relative to the total weight of the composition, and better still from 5% to 40%.

17. A composition as claimed in one of the preceding claims, wherein the volatile solvent is chosen from volatile hydrocarbon-based oils containing from 8 to 16 carbon atoms, and mixtures thereof.

18. A composition as claimed in one of the preceding claims, wherein the volatile solvent is chosen from branched  $C_8$ - $C_{16}$  alkanes and branched  $C_8$ - $C_{16}$  esters, and mixtures thereof.

19. A composition as claimed in one of the preceding claims, wherein the volatile solvent is chosen from  $C_8$ - $C_{16}$  isoparaffins and isododecane, and mixtures thereof.

20. A composition as claimed in one of the preceding claims, wherein the volatile solvent represents a mass content of from 5% to 97.5%, preferably from 10% to 75% and better still from 15% to 45%.

21. A composition as claimed in one of the preceding claims, wherein the liquid fatty phase also contains at least one nonvolatile oil.

22. A composition as claimed in one of the preceding claims, wherein the liquid fatty phase also contains at least one nonvolatile oil chosen from hydrocarbon-based oils of mineral, plant or synthetic origin, synthetic esters or ethers and silicone oils, and mixtures thereof.

23. A composition as claimed in one of the preceding claims, wherein the liquid fatty phase contains at least 40%, relative to the total weight of the liquid fatty phase, of apolar oil, and better still from 50% to 100% relative to the total weight of the liquid fatty phase.

24. A composition as claimed in one of the preceding claims, wherein the liquid fatty phase represents from 5% to 99% relative to the total weight of the composition, and better still from 20% to 75%.

25. A composition as claimed in one of the preceding claims, which constitutes a care and/or treatment and/or make-up composition for keratin

materials.

26. A composition as claimed in one of the preceding claims, which also contains at least one dyestuff.

27. A composition as claimed in claim 26, wherein the dyestuff is chosen from lipophilic dyes, hydrophilic dyes, pigments and naces, and mixtures thereof.

28. A composition as claimed in claim 26 or 27, wherein the dyestuff is present in a proportion of from 0.01% to 50% relative to the total weight of the composition, preferably from 5% to 30%.

29. A composition as claimed in one of the preceding claims, which contains at least one additive chosen from water, antioxidants, essential oils, preserving agents, fragrances, fillers, waxes, fatty compounds that are pasty at room temperature, neutralizers, polymers that are liposoluble or dispersible in the medium, cosmetic or dermatological active agents and dispersants, and mixtures thereof.

30. A composition as claimed in one of the preceding claims, which contains at least one polymer which is liposoluble or dispersible in the medium, chosen from vinylpyrrolidone copolymers and C<sub>3</sub> to C<sub>22</sub> alkene copolymers, and combinations thereof.

31. A composition as claimed in one of the

preceding claims, which is in the form of a rigid gel, and in particular an anhydrous stick.

32. A composition as claimed in one of the preceding claims, which is in the form of a mascara, eyeliner, foundation, lipstick, blusher, deodorant product, make-up-removing product, make-up product for the body, eye shadow, face powder, concealer product, shampoo, conditioner, antisen product or care product for the face or the body.

33. A composition as claimed in one of the preceding claims, which is in the form of a stick with a hardness ranging from 30 g to 50 g.

34. A lipstick composition in stick form containing at least one continuous liquid fatty phase comprising at least one volatile solvent, the liquid fatty phase being structured with at least one non-waxy polymer giving the composition the appearance of a deformable elastic solid with a hardness ranging from 30 g to 50 g, in the absence of wax.

35. A composition as claimed in claim 34, which also comprises at least one additive chosen from fatty compounds that are pasty at room temperature, liposoluble polymers, and mixtures thereof.

36. A cosmetic care, make-up or treatment process for the keratin materials of human beings, comprising the application of a cosmetic composition in

accordance with one of the preceding claims, to the keratin materials.

37. The use of a combination of at least one volatile solvent and of at least one polymer with a weight-average molecular mass ranging from 1 000 to 30 000, comprising a) a polymer skeleton containing hydrocarbon-based repeating units containing at least one hetero atom, and b) optionally pendent and/or terminal fatty chains that are optionally functionalized, containing from 12 to 120 carbon atoms and being linked to these hydrocarbon-based units, in a cosmetic composition or for the manufacture of a physiologically acceptable composition, in order to reduce the transfer and/or deposit of traces of a film of said composition, applied to the keratin materials, onto a support placed in contact with said film and/or to improve the staying power of said film.

38. The use as claimed in the preceding claim, wherein the polymer is a polyamide comprising terminal groups with an ester group comprising a hydrocarbon-based chain containing from 10 to 42 carbon atoms.

39. The use as claimed in claim 37 or 38, wherein the volatile solvent is chosen from C<sub>8</sub>-C<sub>16</sub> isoparaffins and isododecane, and mixtures thereof.